IND

MOTOR TREND

JUNE 1961 35¢

CHEVROLET'S NEW IMPALA SUPER SPORT WITH THE NEW 409 ENGINE

BUICK'S NEW SPECIAL SKYLARK
—more power, styling changes

FORD'S NEW FALCON FUTURA

PONTIAC'S NEW TEMPEST COUPE

COMPACT WAGON TESTS:
FALCON, AMERICAN, LARK, CORVAIR
OLDS F-85, BUICK SPECIAL, TEMPEST
VALIANT, LANCER and COMET

THE INSIDE STORY OF THE INDY 500

PETERSEN PUBLISHING COMPANY

announcing

From Buick Motor Division, General Motors Corporation—a new-size treasure with full-size comfort and a price to pleasantly surprise you.

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Often in your most secret dreams you've pictured yourself in a spell like the Skylark's. But expect even more than you dreamed a car could be. Expect the thrilling new Skylark V-8 to almost anticipate your desires. Expect handling precision which makes you feel you and the Skylark are one. Expect admiration. Oohs for the bucket-seat interior. Ahs for the Landau lines of its roof. And expect to be in that privileged circle of owners only if you come soon. For the Skylark is a limited edition car.*

BUICK Skylark

*Bucket seats optional at extra cost.

Exciting new proof . . . when better automobiles are built, Buick will build them.

West-Coast Dragster is Triple Record Holder

Records: Cotati Drag Strip: 138.00 mph—E.T. 10.80 sec.
Vacaville Drag Strip: 139.66 mph—E.T. 10.44 sec.
Half Moon Bay Drag Strip: 138.79 mph—E.T. 10.60 sec.
Top speed on one run—143 mph

Owner: John Batto, Vineburg, Calif.

Running Class: A-Altered

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Horsepower Rating: 450 HP

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MOTOR TREND

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This month's cover features a rapidly departing Chevy SS with the big 409 engine. Also shown are the new Buick Skylark and the interior of the Falcon Futura. Reports on all appear in this issue.

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Racing Ace Johnny Mantz completes oil check on a '61 Galaxie driven at 120 mph at Ford's Kingman, Arizona, Test Center.

THEY HARD-PEDALED A '61 FORD OVER 4,000 MILES...

and the oil stood the test beautifully!

Reports Johnny Mantz: "This machine really got a workout ... across the desert from Needles to Nogales and down the pike from Boise to Broken Knee. It was smashed over hot desert sand...into water traps at high speed...and crawled through city streets. Afterwards, they brought it back here to Kingman, where I drove it at 2 miles a minute. Then they dumped the oil and checked it. No sludge in this crankcase! Ford's new full-flow filtering rig really works. 4,000 miles between oil changes. Easy with this one!"

Johnny Mantz

THE '61 FORD!

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Letters

ONE VOTE FOR BIG CARS

For the last two years or longer, I've been following the controversy involving big cars vs. small ones, which has raged back and forth in MOTOR TREND and all of the other motor journals. I've read how the small car is more practical, the six-cylinder engine is more efficient and economical, the public wants more small cars, and the like — until I finally succumbed and decided that there must be something to it. After all, who am I to defy all these experts?

So last December I bought myself a 1961 Comet — 101-hp engine and automatic shift. Up until that time I had been the happy (and I didn't know how happy!) owner of a 1952 Cadillac, which had less than 20,000 miles on it when I sold it to buy the Comet.

I am now driving a car with half the comfort, half the performance — and the same gas bill. My Comet gets 13 mpg in the city and 19 on the highway, as compared to 12 and 17½ for the Cadillac. And as for the six-cylinder engine, I can only say that I feel like I'm driving something out of the Middle Ages after driving a modern V-8.

Please chalk up my vote in favor of the big cars. I for one intend to get back into one as soon as I can figure out how to get rid of that beast in my garage without losing my shirt!

Dick Hampton San Antonio, Tex.

THREE-YEAR GUARANTEE

In reference to liberal new-car guarantees, it is interesting to note that the 1940 Willys was guaranteed for three years or 100,000 miles. This undoubtedly holds the record for American cars.

I owned one of these automobiles — and a very good car it was.

Edgar W. Frazer West Orange, N.J.

A BIG ORDER

I noticed a very interesting item in "Motor Trends," stating that Chevy's 409-cubic-inch high-performance engine option is pushing Ford toward a four-speed transmission option. This is reasonable.

But I've never seen a 390-cubic-inch Ford with a three-speed box handle a 348 Chevy stock for stock. True, Pontiac cut a good half-second off their elapsed time with a four-speed box, but Ford would have to cut quite a bit more than a half-second to handle a 348 Chevy.

Joe D'Auria Port Morris, N.J.

"PERSONAL" DODGE

After seeing the Olds Starfire at the recent GM Motorama, an idea struck me.

How about taking a Dodge Polara convertible, plopping in the 383-cubic-inch ram-tuned engine, and the three-speed manual gearbox on a console between the bucket seats, and beefing up the Torsion-Aire system, a la Chrysler 300-G?

The Polara handles much better than the Olds and, it seems to me, with a jazzed-up interior and the same exterior, this job would not only look like a hot car, it would be one.

With the current fad for "personal" cars, it seems to me that a car like this could become one of the hottest sellers in the country, and it could help beef up

continued on page 8

"The way the body is assembled is rather novel."

FIRESTONE ANNOUNCES NEW SUPER SPORTS ALL-TRACTION DIRT TRACK TIRE!

The new Super Sports All-Traction tire is engineered to combine an aggressive tread with brand-new stability—to give you plenty of forward bite without sacrificing a steady stance. Its Lo-Wide silhouette puts more gripping pattern on the track, lets more of its driving elements bite down deep. You get fantastic acceleration, plenty of hold on turns, too. And, thanks to the unique tread design, you stay on course in drifts and hold it when you hit the straightaway! This new tire stands up longer, too, because of tread-cooling shoulder grooves, track-tailored Firestone Rubber-X and a Safety-Fortified nylon cord body. Any wonder it's clawing its way to the head of the pack? See the Super Sports All-Traction tire today at your Firestone Dealer or Store!

Super Sports All-Traction Dirt Track Tire with new Lo-Wide Silhouette

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GARD-KOTE
Rust-Resistant Alloy Coated Steel Case and End Caps
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sound!

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SEE YOUR favorite dealer for the "Quiet-Tone" Muffler to fit your car . . . plus a complete line of Duals . . . from the world's largest producer of Dual Exhaust Systems.

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The Winners of the MOTOR TREND—
Art Center School Design Competition
Will be announced in the **July Motor Trend**

Letters *continued*

the middle-priced field, which sure could use it.
Bob Duncan Norwalk, Calif.

LEADFOOT TEST DRIVER?

I was somewhat amazed to see the gasoline mileage figures for the 1961 Cadillac in your April issue.

I have owned new Cadillacs since 1955: a '55, '57, '58, '59 and a '61, and in my experience have never got less than 13 mpg. The range has actually run from 13 to 17 mpg, with the most usual figure just over 15.

I have just returned from a trip to Miami Beach with most driving being done in the 60-to-70-mph range and have averaged about 15.2 mpg for the trip, including eight days of city driving in Miami Beach.

If you averaged only 8 to 12 mpg, either your test driver was a real leadfoot, or someone was stealing your gas.
Dale C. Pysher Bridgeport, Pa.

SUGGESTED REMEDIES

In your March issue Larry Day of Morgantown, Kentucky, stated that he was having trouble with a '57 Ford overheating.

I have a 1958 Ford Six which performs fine, except for high-speed driving in hot weather, when it overheats approximately every 50 to 100 miles and requires more water.

I found that, with the radiator cap directly above the inlet to the radiator, at high water flow rates the water was working by the vacuum breaker in the radiator cap and out the overflow. This condition only existed in hot weather when the thermostat was open and I was driving at high speed.

I corrected the problem completely by installing a small spring to hold the vacuum breaker up against its seat.
Donald H. McKay Old Town, Me.

I am an auto mechanic and have run up against this type of complaint for a long time and have found a solution which will undoubtedly cure his trouble.

All Fords of that year and other years call for a 14-pound pressure cap. I replace this with a seven-pound cap and haven't had any complaints of water loss since.

I hope this will help some of the other readers of MOTOR TREND with similar problems.
Ed Richards Central Islip, L.I., N.Y.

GRUDGE RACE

I own a 1960 Pontiac Catalina two-door hardtop with a stock 348-hp engine, three-speed column-mounted manual transmission and a 3.64-to-1 rear end.

I am continually grudge-racing a 1960

continued on page 10

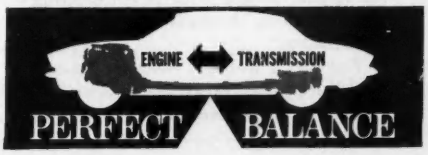
Pontiac's new Tempest coupe is here!

(Gas-saving 4-cylinder engine! Dust-kicking action! Seats six!)

A sharp new coupe joins Tempest sedan and station wagon models. Loaded with exclusive design features from Pontiac performance specialists. Independent suspension at all four wheels. Engine in front, transmission in rear. 50-50 balance. Big 15-inch wheels on a Wide-Track. Cuts a hairpin curve flat and steady. You call the shot on the engine. A gas-saving, 4-cylinder, inclined power plant with a horsepower range from 110 to 155. Extra cost option: Custom trim and bucket seats in the front cockpit. See it. Drive it. It's priced with the compacts.

PONTIAC MOTOR DIVISION • GENERAL MOTORS CORPORATION

PONTIAC'S TEMPEST
PICKED BY MOTOR TREND MAGAZINE AS
CAR OF THE YEAR



Letters *continued*

Chevy Impala two-door hardtop with a 335-hp engine, four-speed transmission on the floor and 5.14-to-1 rear.

He always beats me by one-half to one car length every time we race.

I would like to know what I could possibly do to my car to beat him and still keep it as stock as possible.

Robert DeVita Clifton, N.J.

If the 335 Chevrolet with the specifications you outline only beats you by one-half to a full car length, there must be something wrong with the Chevy!

How do you expect to compete with a hot 348-cubic-inch engine fitted with a 5.14-to-1 rear-end gear ratio when your 389-cubic-inch engine must pull a 3.64-to-1 gear? The puny 41-cubic-inch superiority of your engine certainly doesn't warrant competing with such a wide divergence in gear ratios.

ON RPO'S

I would like to compliment John Christy on his RPO story in the March issue.

I live in Brooklyn, and since this is across the nation, people here buy differently from the people out West. Here in Brooklyn I have noticed that there are a lot of Chevy Impalas running around with six-cylinder engines. The owners claim they made this choice of engines because they want good gas mileage. After they have the car a few months they claim they aren't getting the gas mileage they expected. They find out that the comparatively heavy Impala puts the Six under almost constant strain in city driving, and their mileage drops off and their repair bill steadily climbs.

I earnestly feel that Chevrolet should not sell the Impala with a six-cylinder engine. The buyer feels that if a big company like GM can offer a car with a Six, it should act properly and do all the things that the ad men say it can do.

I feel that the Chevy Six is a good choice in the business class car, with standard three-speed transmission, no power steering or power brakes, no power windows, factory-recommended rear axle ratio, and the small body.

The small Eight (170) is also for this car, but it offers a little better pickup and maybe an automatic transmission can be allowed, and gas mileage will still be good.

The 230 Eight is a fine choice for the next size body, with automatic transmission and either power steering or power brakes — not both.

The 250 and the 280 are good for the Impala models with power steering, power brakes, automatic or standard transmission.

The 305 I feel is a must for air-conditioned cars, allowing the power losses from the accessories and the greater power loss of the air conditioner and still have ample power for the road.

The 340, 350 and the newest 409 should be options hooked up only to the three- or four-speed manual transmissions — never the automatic.

I feel that if a system like this could be followed by all makes, there would be less mechanical lemons.

Paul A. Di Pietra Brooklyn, N.Y.

COMING UP

It would seem that your test reports are attemping to perpetuate the horsepower race. You tend toward superlatives when describing the power of the hotter mills in the cars. There's a tendency to make the regular V-8 seem underpowered in comparison to the hotter versions.

Your biggest lapse is the failure to say anything about the six-cylinder models. These have staged comebacks and certainly deserve road-testing. Although they may be in the minority, six-cylinder devotees are still a large group, and in view of the current economy mood, they deserve some attention.

Lewis Storey

Road tests of the Sixes are scheduled for a near-future issue.

ONE SATISFIED READER

I have been a reader of your magazine for about two years, and I have gained a lot of worthwhile automotive information from each issue. Current information on new models is always of prime concern to me, and your publication has always received my greatest attention.

Special admiration goes to the editors. Their tasteful comments in recent issues have been quite in agreement with my own opinions and ideas.

MOTOR TREND gives a broad, sensible look to the world of cars. It tells a story that means more to the type of individual who may know nothing about cars — people who don't know a roller-tappet cam from a locked rear end. I am glad that your magazine steers away from the technical, degree'd type of information that many other magazines go for. Your type of reader will read your magazine for the broad auto outlook.

I am delighted with MOTOR TREND.

Gary Roberts Boise, Idaho

THE RIGHT SIZE

In some past issues of MOTOR TREND I read that the '62 cars, especially Ford and Chevrolet, will be shorter — at least one foot less in overall length — than the current '61 models.

This year the big cars were only about four inches shorter than last year's. De-

"Well, I'll take it, but what about the wheels, windows, doors and all that?"

troit should keep this size and length because they're just right — not too long and not too short.

If Detroit keeps on shortening the big cars year after year, they will soon be as short as the current compact models.

Car buyers who buy compacts now are wise, because in the near future that's all there will be on the market.

Richard Szurma Milwaukee, Wis.

DETROIT IS NOT ALONE

I don't see why Detroit cars get all the blame for poor quality control.

My '61 Volkswagen at 6,000 miles burns a quart of oil between changes, the brakes won't hold fluid, steering is stiff, and the transmission hops out of low gear. Aside from a transmission overhaul at 300 miles, which did little good, nothing has been corrected by the dealer—and this is not a "bootleg" VW.

It was rare to have trouble with a Volkswagen in past years, but I know of several 1961's with difficulties like mine.

Edward H. Romney St. Johnsbury, Vt.

LOST APPETITE FOR DETROIT

There is much criticism when one purchases a foreign automobile, but when a person can buy one for, say, $1,000 less than an American car, then get 2½ to 3 times better gas mileage, plus good material and workmanship, I will take the foreign compact. I wish they would send us some good pickups.

I have about lost my appetite for the Detroit "masterpieces." It is disgusting to pay $3,000 to $5,000 for one of these "marvels," and then realize that the metal in the bodies and doors is so inferior that gaping holes are rusted through them in a year's time.

John Shivey Logansport, La.

AN OPEN INVITATION

We would like to invite all MOTOR TREND readers owning cars of 1925 through 1942 vintage to participate in the fifth annual Illinois Classic Concours. While the meet is primarily for classic cars, there will be a Special Interest Class for all other cars built during this span of years.

Concours date is Saturday, May 27. It will be held at Glenview Naval Air Base, just northwest of Chicago, Illinois. There will be at least 18 trophies in five classes, including one for the classic car travelling the greatest distance to the meet. An awards dinner will follow the Concours.

For full details, registration forms, etc., write to Bill and Marian Deutsch, 6278 W. North Ave., Chicago 39, Ill.

William S. Snyder Chicago, Ill.

VISUAL REMINDER

Is it possible to obtain a dashboard-

continued on page 12

Big price breakthrough in magneto ignition!

NEW HOT SPARK! NEW COOL COST!

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Engine: 6 Cylinder ..... 8 Cylinder .....
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WALKER MFG. CO., Dept. MT-561 **Racine, Wis.** / **Dealer Inquiries Invited**

Letters *continued*

mounting gauge that shows gasoline consumption directly in miles per gallon while driving?

This type of gauge would offer many advantages to the average car owner. Most of them wish for better mileage but seldom get it due to faulty driving habits. But with a visual indication of the results of such habits always before their eyes, many drivers would improve their driving.

If there is such an instrument available, or even under development, I certainly would like to hear about it, as would all other MT readers.

R. Blagden East Hampton, Conn.

There is no such unit available, although several have been attempted.

STUDEBAKER-PACKARD FAN

I have owned several different makes of automobiles. By the process of elimination I have found that Studebaker-Packard Corp. offers the most economical and carefree car or pickup on the market. Studebaker-Packard has never received the praise or the sales they deserve. Why?

If the Big Three would invest part of the money they now spend on advertising in their automobiles, I am sure they could control the quality to about equal that of Studebaker-Packard and American Motors.

The Big Three produce the best salesmen in the world, while the independents produce the cars that have more common sense built into them — no planned obsolescence or radical styling and, best of all, the quality and trouble-free operation still remain.

Roy Winebarger Orlando, Fla.

NO PARKING

I have a chance to buy a 1953 Ford convertible in very good condition. The only trouble is the automatic transmission cannot be put in PARK.

I would appreciate it if you could let me know if this would affect the transmission further in any way. I've driven it frequently and have found nothing else wrong.

Don Mathey North Royalton, Ohio

The PARK *position of a Fordomatic or Mercomatic transmission is completely divorced from the transmission's other functions. It has absolutely nothing to do with the gears, clutches or bands but merely engages a pawl (hook-like lever) in a serrated drum on the transmission's output shaft.*

Usually there are two reasons why the parking device becomes inoperative: either the linkage is out of adjustment, or the end breaks off the pawl from abuse. In either case the cost of repair is nominal.

GURNEY AND LOTUS CRACK NASSAU RECORD WITH AUTOLITE SPARK PLUGS!

Dan Gurney averages a record 89.54 miles an hour, wins the International Nassau Trophy Race, his first major solo victory in six years. Dan's reward: some $10,000—more than $1.00 per second of driving time. His car: a flame-colored 2½-liter rear-engine Lotus. His spark plugs: Autolite. Lesson for the day? Makes no difference if you own a Lotus or your name is Dan, Autolite Spark Plugs can't be beat. There's a set made especially for the car you drive. As Gurney and the Lotus well prove, you're always right with Autolite.

AUTOLITE

SPARK PLUG DIVISION • TOLEDO 1, OHIO

Motor Trends

Chevrolet may take a leaf from Pontiac's book and use a slanted four-cylinder engine to power its new smaller-size Chevy for 1962. This new car, which is now designated the H-35, will begin a whole new class of automobiles which will fit between the standard-sized cars and the compacts. Ford and Mercury are also readying entrants in this new category. All three cars have a wheelbase of approximately 115 inches.

Chevrolet's H-35 definitely will have the unique single-leaf rear spring which offers lower manufacturing costs, a 20-pound-lighter rear end and a softly sprung car — probably comparable to coil springs. Other auto makers, especially Ford, would like to adopt the single-leaf spring also, but they are somewhat afraid of buyer resistance to a rear spring consisting of one piece of metal. There is a chance, however, that Ford will yet adopt this for one of its '62 small cars.

Besides the size, the big difference between the present Falcon and Comet and the coming smaller Ford and Mercury mentioned above, will be extra horsepower. Ford management has been stung by criticism of the lack of power in their compacts and they mean to make up for this with the new cars. A brand-new 221-cubic-inch V-8 will be up front. Initial production is slated to begin at Ford's Cleveland engine plant in early August.

The Bonneville Salt Flats will be the scene of another unusually active season this summer. Every major name in speed is expected to return again for assaults on records. Among them will be Donald Campbell, Mickey Thompson, Dr. Nathan Ostich and Bill Burke. The Southern California Timing Association will resume supervision of its 13th week of trials August 20 through 26. Several other special runs will begin some weeks earlier.

Next year Dodge will ease out of the medium-priced field entirely and concentrate on the low-priced standard class, according to widespread reports in Detroit. For 1961, Dodge has only one medium-price entrant, the Polara.

This year the booming sport of karting will have the largest program of championship trials ever undertaken by any form of organized racing. The Go Kart Club of America is sponsoring 57 regional events, which will send winners in each class to 10 area championships. The finalists from the area events will be flown to the National Championships at the Dart Kart Speedway in Mansfield, Ohio, on August 16 through 20.

Ford's Cardinal, the small-small compact, will begin rolling off the assembly lines in October. Initial sales targets are 200,000 units in the U.S. in the first year and 175,000 in Germany. Ford's development of the Volkswagen-sized car has reportedly been hampered by the fact that most of the tooling and engineering of the body has been done in this country (where the inch is the standard measurement), while the bulk of the tooling and engineering of the drive-train components has been done in Europe (where the centimeter is the standard measuring unit).

American Motors is planning to change the designation of the Ambassador series of Ramblers for 1962. New name for the luxury line has not yet been chosen.

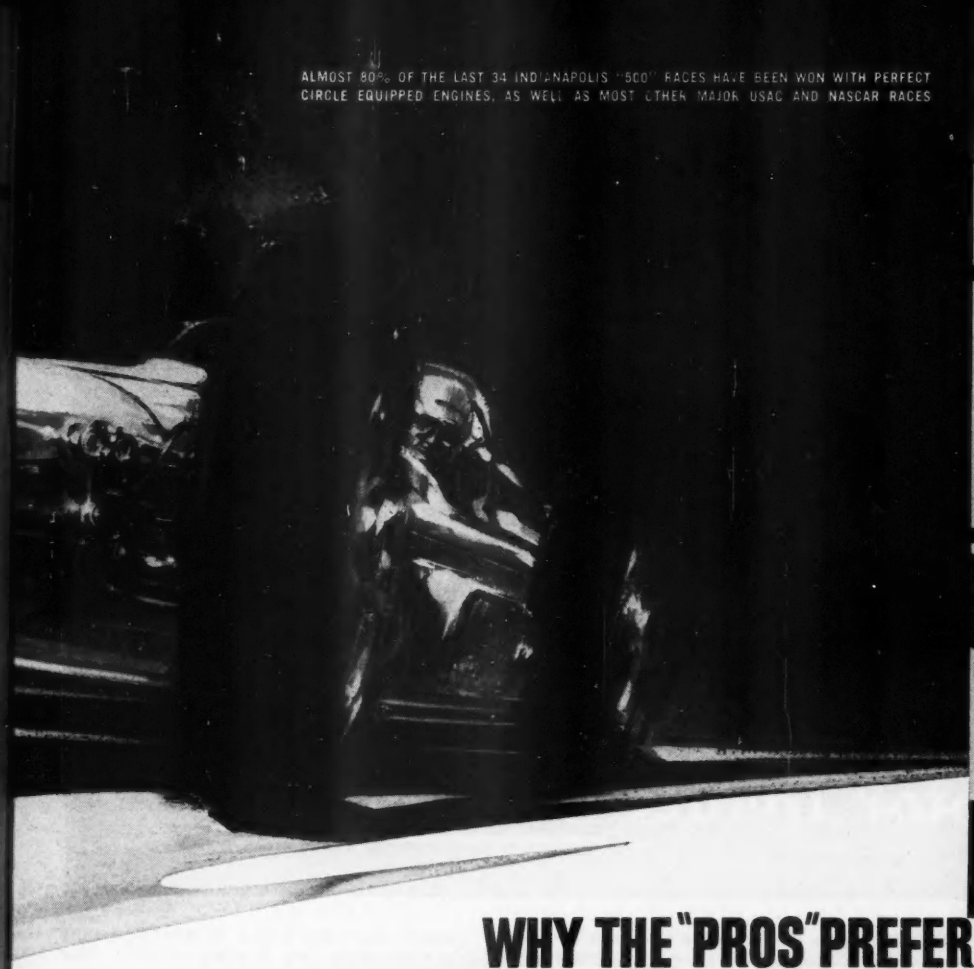
The 1963 Chrysler cars, which will be introduced in a mere 18 months, are expected to have some wild styling features, such as left-of-center fins and other unbalanced items, somewhat on the order of the XNR dream car.

Pontiac's research engineers have been playing with engines ranging from 425 to 475 cubic inches (considerably more than the current 389-cubic-inch unit) in order to keep that Division's place in the performance race for the years to come.

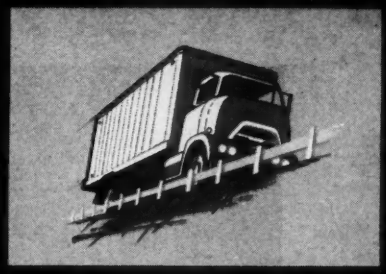
The auto makers have embarked on a cooperative car-lighting research program which has resulted in the testing of some interesting items that could be on tomorrow's cars. Getting a good deal of attention are amber-colored turn signals, which would be more apparent to following motorists. Also being studied is a device that would greatly increase the intensity of the rear brake light during daytime use.

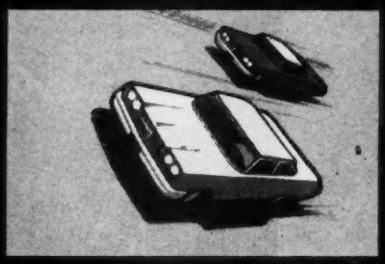
George Walker, Ford's famed styling chief, celebrates his 65th birthday this spring. Company policy dictates that executives will automatically retire upon reaching this milestone. Some rare exceptions have been known but, as of this report, no official statement has been made. Should Walker leave Ford, it will mark the passing of a major era in the firm's history and in that of the automotive industry as a whole. There is no known prominent protege waiting to step into this important position.

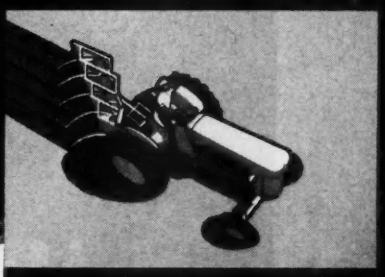
continued on page 16



ALMOST 80% OF THE LAST 34 INDIANAPOLIS "500" RACES HAVE BEEN WON WITH PERFECT CIRCLE EQUIPPED ENGINES, AS WELL AS MOST OTHER MAJOR USAC AND NASCAR RACES







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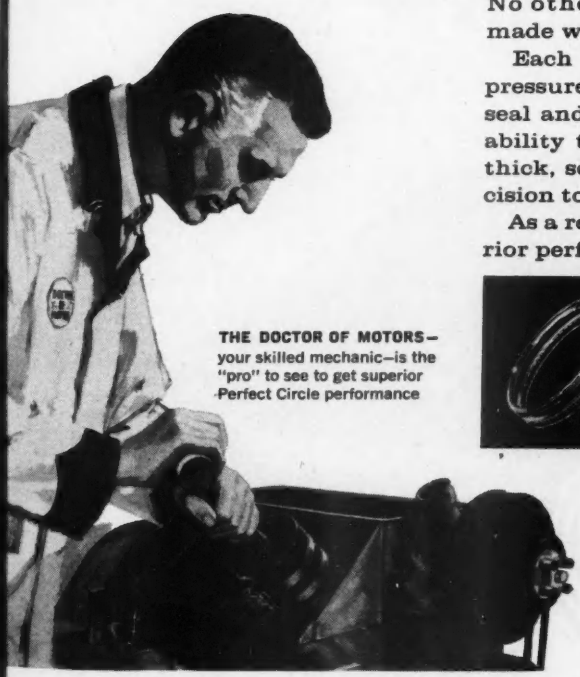

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Motor Trends in Pictures

Two experimental cars that caught the eyes of the crowds at the recent International Automobile Show in New York were the Corvair Sebring Spyder Coupe (above) and the McLouth Steel XV'61 (below). The Corvair is an amplification of the popular Monza theme with the added trim identification of white striping over the top and chrome wire wheels. Within the bucket-seated passenger compartment is a brushed aluminum dash, an electric tachometer within a center console assembly and a competition-type steering wheel. The Corvair flat Six is equipped with four single-barrel carburetors, each positioned midway between two cylinders, and a special experimental camshaft.

The McLouth XV'61 is an experiment in future design—an auto that may be either driven on highways or attached to a unique monorail system. Stainless steel is prominent in its construction.

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EDITOR'S REPORT
By Don Werner

OLDS' NEW STARFIRE

SEVERAL TIMES in recent years Detroit has injected a sporty flavor into some of its cars by fitting them out with the interior trimmings of sports cars. The gadgets generally resorted to have been tachometers, floor shifts and, if nothing else, bucket seats. Two outstanding examples of such treatment are the Thunderbirds and the Chrysler 300 series. Recently Chevrolet dressed up a Corvair coupe in this way, called it the Monza and was promptly rocked back on its heels by the enthusiastic reaction of car buyers.

Now we have, in this issue, reports on the Chevrolet Impala SS, the Buick Skylark and the Falcon Futura. Coming next month, in MOTOR TREND, are the F-85 Cutlass and the Comet S-22. And right here, on these pages, is a look at the Oldsmobile Starfire.

In order to further study this new trend, one of the first versions of the new Starfire was driven extensively by MOTOR TREND editors. The standard Olds 98 and Dynamic 88 had been previously road tested and reported upon in March MOTOR TREND and since the basic engineering differences between the sedans and the Starfire are slight, a formal road test was unnecessary. So only the special characteristics of the Starfire were examined.

The Starfire is a convertible of the middle Olds Super 88 series, with a rated engine output of 330 hp instead of the standard 325, obtained by raising compression from 10 to 10.25 ratio. The only other significant power train alteration is the use of larger 3.42 rear axle ratio as standard equipment.

A good look at the Starfire interior is provided by the big overhead view opposite, with a closeup detail photo on the page. Most obvious are the front seats, which have a bucket appearance but which lack sufficient contour, and hence the chief advantages, of that type. In the rear a conventional bench seat has been used with padded tucks to simulate the bucket shape. One unusual feature in this area is the rear seat radio speaker — an item rare in convertibles — which has been recessed between the seat backs.

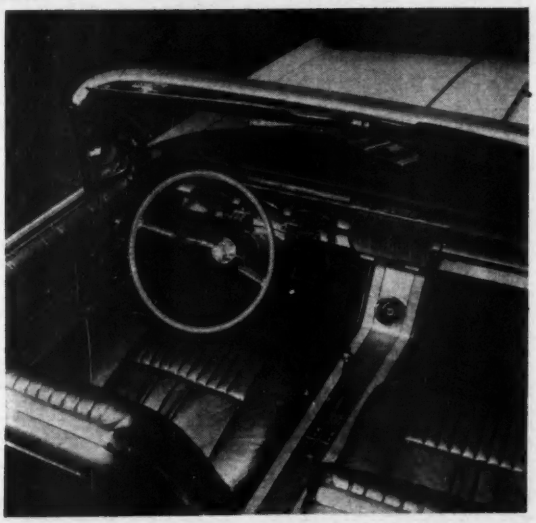
The center console, carrying the gear selector lever and the tach, has the appearance of being improvised since its side panels do not extend to the floor and fully conceal the transmission hump. The tach in its location is read with difficulty while driving and, consequently, loses much of its value.

The floor-mounted gear selector for the Hydramatic is an arrangement more for appearance, since it is not used for going up and down through the gears as with a manual box. Yet it is a better location than a column-mounted lever in this special case, chiefly because it is a natural position and easier to use.

The Starfire's console does not extend back into the rear seat leg area and, in this respect, it is an improvement over other interior layouts of this type in that it does not make passengers entering the rear from the opposite side crawl over an obstruction.

What the Starfire misses most, of course, is a distinctive exterior, such as the Thunderbird has. This is unfortunate, because the Oldsmobile is a superior car in many respects and with a more individualistic appearance overall it might very well have turned out to be sensational. Yet it is an interesting development and one that should be watched closely.

A base price comparison shows the Starfire listing at $4647, the Thunderbird as a convertible at $4637 and the Chrysler 300-G soft top at $5841. The mere $10 difference between the T-Bird and the Starfire indicates what Olds is shooting at. /MT



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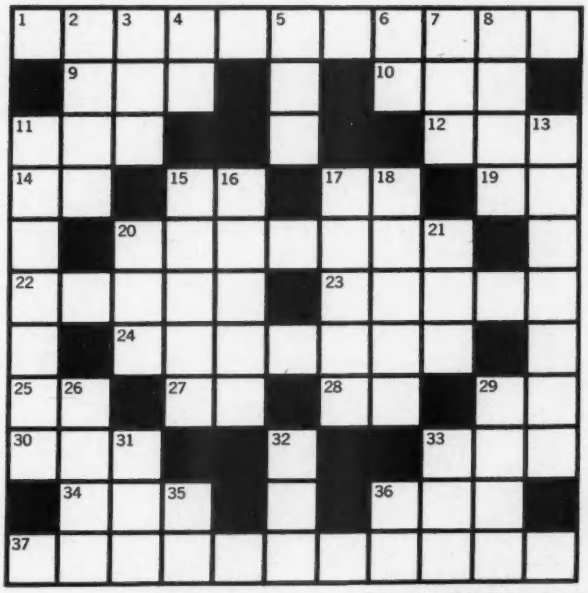

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CAR CROSSWORD

How is your knowledge of cars and the terms of the automotive world? Here is a unique way to test it. This exclusive MOTOR TREND automotive crossword puzzle has been created with the interests of our readers in mind. Naturally, not all of the words used will apply directly to cars, but a good acquaintance with the field should be the key to a quick solution of the puzzle. Correct answers will appear in next month's MT.

DOWN

2. Plant with medicinal value
3. How workers at Volkswagen plant refer to themselves
4. Monogram on the Nardi nameplate
5. The late Mrs. Peron
6. Symbol for beryllium
7. Irish freedom fighters
8. What the bell did when it sounded
11. Triumph two-seater (abbr.)
13. Craft of auto body design
15. Sporty Corvair
16. Rolls, Mercedes and Ferrari can all be described this way
17. Coachbuilding center before World War II
18. Regarding
20. Race driver Hellings
21. Belgium Grand Prix circuit
26. Type of spring, commonly used for rear suspension
29. A race track norm
31. Dutch car with automatic belt drive
32. Most cars have such a tray
33. A Frenchman's word for a cut-down car
35. French masculine article

ACROSS

1. Belle of the Ford Line
9. When the checkered flag is waved
10. Famous British racing car of the 'thirties and 'forties
11. Car of the Year
12. Reply (abbr.)
14. Le Patron's monogram
15. Sports car made by British Motors Corporation
17. Pennsylvania
19. Ferrari 250
20. Whose product is the Plus Four
22. A tool used to smooth surface of wooden wagon bodies
23. Water will do this to oil
24. Queen of Russia
25. Mercedez-Benz Roadster
27. Preposition
28. Street
29. A nurse's degree
30. Race driver Horn
33. Nickname of a classic French sports car
34. Mulberry found in India
36. Buddy
37. America's most famous racing engine

LAST MONTH'S ANSWERS

1 S	2 T	3 R	4 U	5 T		6 M	7 I	8 L	9 L	10 S
11 A	R	I	S	E		12 U	N	I	O	N
V		13 D	A	T		14 A	D	D		E
15 O	16 F		17 C	H	18 E	V	Y		19 G	A
20 Y	O	21 M			R			22 A	R	K
	23 R	I	V	E	R	S	I	D	E	
24 S	C	G			O			25 O	E	26 R
27 M	E		28 P	29 O	R	30 T	31 S		32 N	O
A		33 M	A	L		34 A	U	35 T		S
36 R	37 E	G	A	L		38 C	R	A	39 S	S
40 T	I	A	R	A		41 H	A	N	S	A

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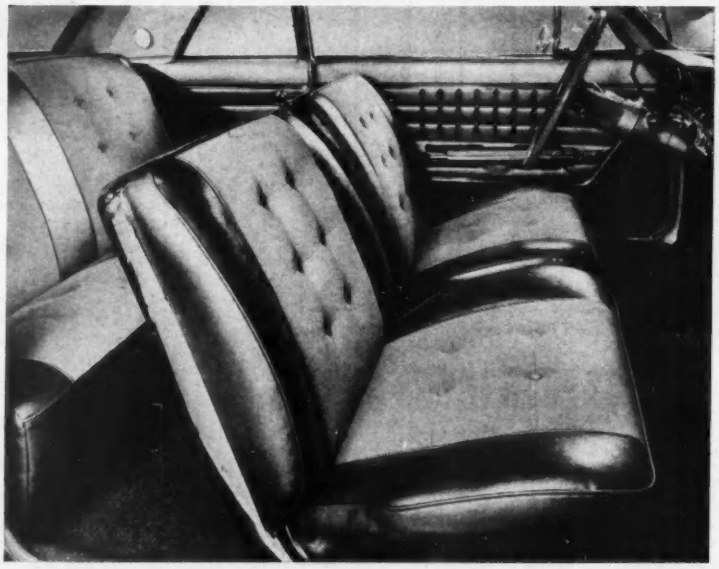
SEPARATE SEATS WITH TUFTED UPHOLSTERY HIGHLIGHT THE SKYLARK'S INTERIOR.



THE BUICK SKYLARK

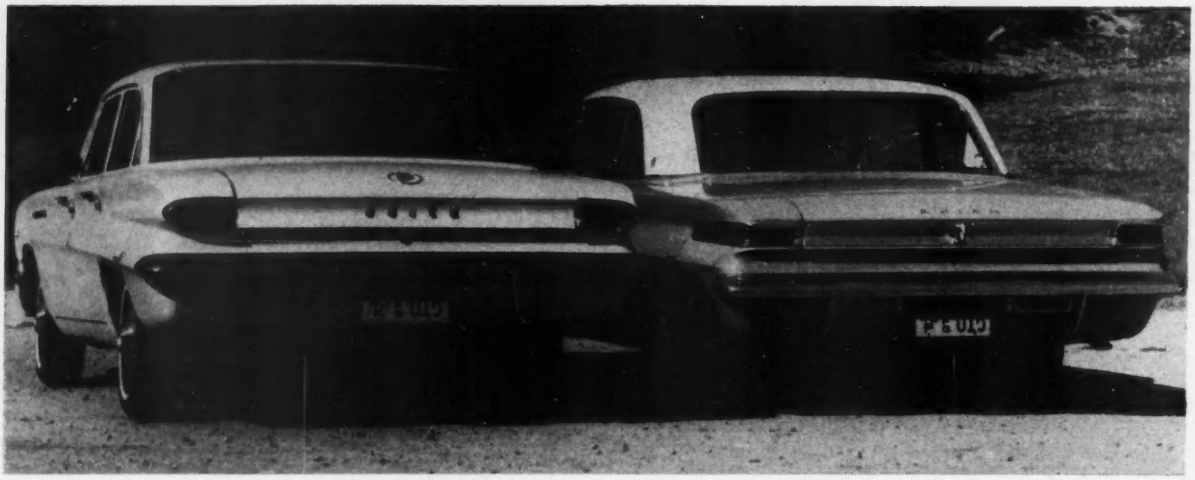
a new luxury coupe that may be a good preview of styles to come in '62

by John Lawlor

BUICK MEANS POWER and luxury to some auto enthusiasts, sluggish and awkward highway manners to others. The make has been a first-class road car for years, yet, in many minds, it typifies the supposed faults of U.S. automotive engineering.

For the most part, its critics have been unfair. Buick has consistently outperformed and outmaneuvered several of its competitors, including one or two others built by General Motors. And certain of its features deserve the attention of anyone claiming a serious interest in automobiles. Buick brakes, for example, are among the very best to be found on any Detroit product.

The '61 Buicks, particularly, have earned the respect of most of those who've driven them. Each of the current series, from



A hint of '62 may be contained in some of the Skylark's changes from regular Special styling. The grille and headlight mounts are completely new, as are the rear quarters, taillights and deck trim, all typical of annual facelifts.

THE BUICK SKYLARK *continued*

the costly Electra to the compact Special, has proven a standout in its class.

But the company's latest offering should quiet the carping once and for all. A 185-hp sports coupe called the Skylark, it has the refinement associated with the Buick name, together with the nimble driving qualities that appeal to those who take the road for the sheer fun of it.

The Skylark, borrowing its name from a wire-wheeled convertible of some years ago, is based on the Special and shares its basic shell with a coupe just announced in the lower-priced series. Details of its exterior and interior trim, however, are completely different.

Heart of the new car is a higher-powered version of the 215-cubic-inch aluminum V-8 developed for the Buick compact. Output figures are 185 hp at 4800 rpm and 230 lbs.-ft. of torque at 2800, compared with 155 hp at 4600 and 220 lbs.-ft. at 2400 for the normal engine. The hotter unit, also available as an option in the regular Special, gets its extra punch primarily from a four-barrel carburetor substituted for the stock two-barrel and an increase in compression ratio to 10.25 from 8.8.

A three-speed manual gearbox is standard, while the Special's unusual split-torque automatic can be fitted at extra cost. Either transmission is accompanied by a 3.36 rear axle.

Styling of the Skylark is of particular interest because it may forecast changes to come next year in other Buick lines. It differs from the parent design much more than usual for a body being introduced in the middle of the season.

Nothing identifies a given year and make as much as the frontal styling, and that's one of the Skylark's most distinctive features. In place of the six horizontal bars forming the grille of standard '61 Buicks, two heavy sections above and below a set of thin louvers are used on the sports coupe.

Other changes include thin slots in place of oval portholes, taillights incorporated in a decorative strip extending across the trunk and around both flanks, and modified sheet metal to accommodate the new trim and also enlarge the rear wheel wells.

Distinctive features of the Skylark include new hubcaps that resemble finned brake drums, squared wrap around taillights, luxurious cockpit detailing and, as an option, a white fabric roof cover that is vinyl coated for durability.

Such alterations are characteristic of annual facelifts. Consequently, Buick may be not only showing a new body design but sneak previewing its '62 styling as well.

A novel Skylark option is a roof cover of white fabric, coated with vinyl for easy cleaning and long wear.

The interior is upholstered in a combination of vinyl and a rich fabric similar to that used by Buick in the plush Electra 225. A tufted and buttoned pattern provides the look of genuine luxury. Front seats can be either a bench or a pair of buckets. High-grade carpeting covers the floor and, to prevent scuffing, is also used on the lower part of the doors.

The factory doesn't consider the Skylark a Special, unless the word is spelled with a small "s." Though based on the compact, it's being touted as something quite distinct. The official attitude came to light when a MOTOR TREND staffer asked a Buick representative the price.

"About $3500, fully equipped," was the reply.

Our man must've turned slightly pale because the gentleman from Michigan quickly added, "That's a thousand dollars *less* than a Thunderbird!" Our man was silent.

Which raised a point. Those who've seen the Skylark tend to regard it as a sort of Buick Monza. Obviously, the factory has a more ambitious view!

Of course, as the price suggests, it's really something in between. It's neither low enough in price to have the popular appeal of the Monza nor distinctive enough in appearance to command the prestige of Ford's four-seater. But there's a great deal of significance in the fact that one of GM's upper divisions finally acknowledges the success of the Thunderbird, as well as the general demand for specialized cars.

In a broad sense, the Skylark distills the flavor of machines like the Thunderbird, Chrysler 300-G and Oldsmobile's new Starfire in a smaller, lower-priced package.

For the future, there are rumors that the Skylark will be offered with a four-speed manual gearbox, presumably adapted from the Corvette. If that happens, staunch enthusiasts who've criticized Buick for all too long should be more than silenced; they might even have a good word or two for the make. /MT

THE INSIDE STORY OF INDY

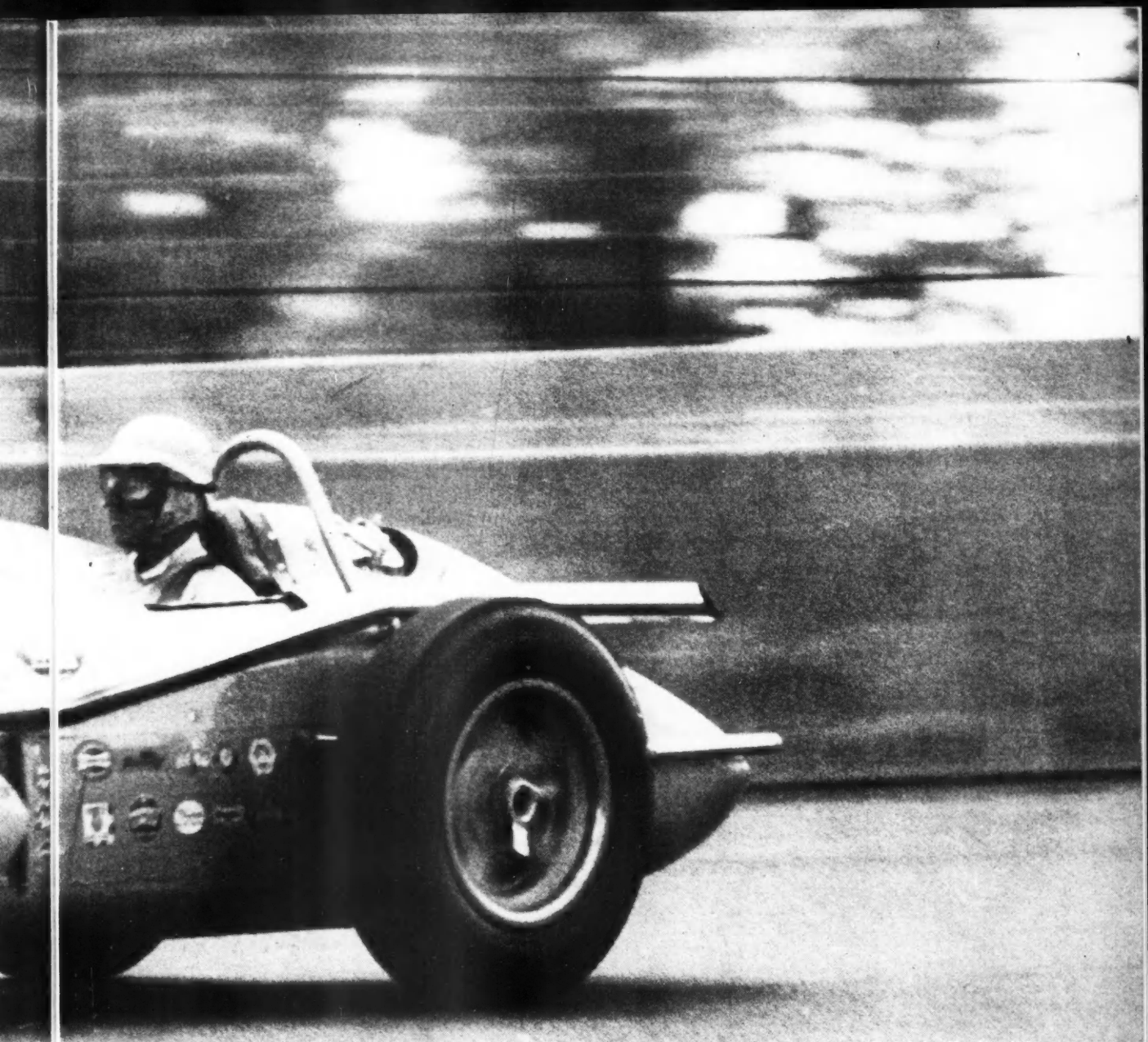
a top writer captures the excitement behind our greatest auto speed event

By Griff Borgeson

INDIANAPOLIS is literally fantastic in many ... the most obvious being ... of which ...

... rather fabulous cornering speeds. To wit- ... in believing ...

... but, for those on the ... this really cataclysmic contest,



the race proper is only the final round in a year-long struggle for gold and glory. The preparations for this year's race began when last year's ended, when each lesson, each success and failure stood out for anyone with eyes to see. In many cases, preparation began even farther in the past. This year a gas turbine car has been under development, but Frank Kurtis has been working on the peculiar problems of turbine propulsion at the Speedway since the mid-1950's. But let's say that you are a typical race-car owner, back at the Brickyard for another shot at the biggest and most elusive target in American racing.

Although the starting field is limited to 33 there are some 60 others who, like you, are working and investing to win a place in the 500's starting lineup. In this group of sportsmen, each of whom has upwards of $20,000 in his machine and effort, there are assorted motives. There are those who are there to win the race in spite of all the forces of Hell. There are those practical ones who know that, if they can't qualify for the 500, they can run their Speedway roadsters at Milwaukee just five days later and at four other major events during the season. And there are

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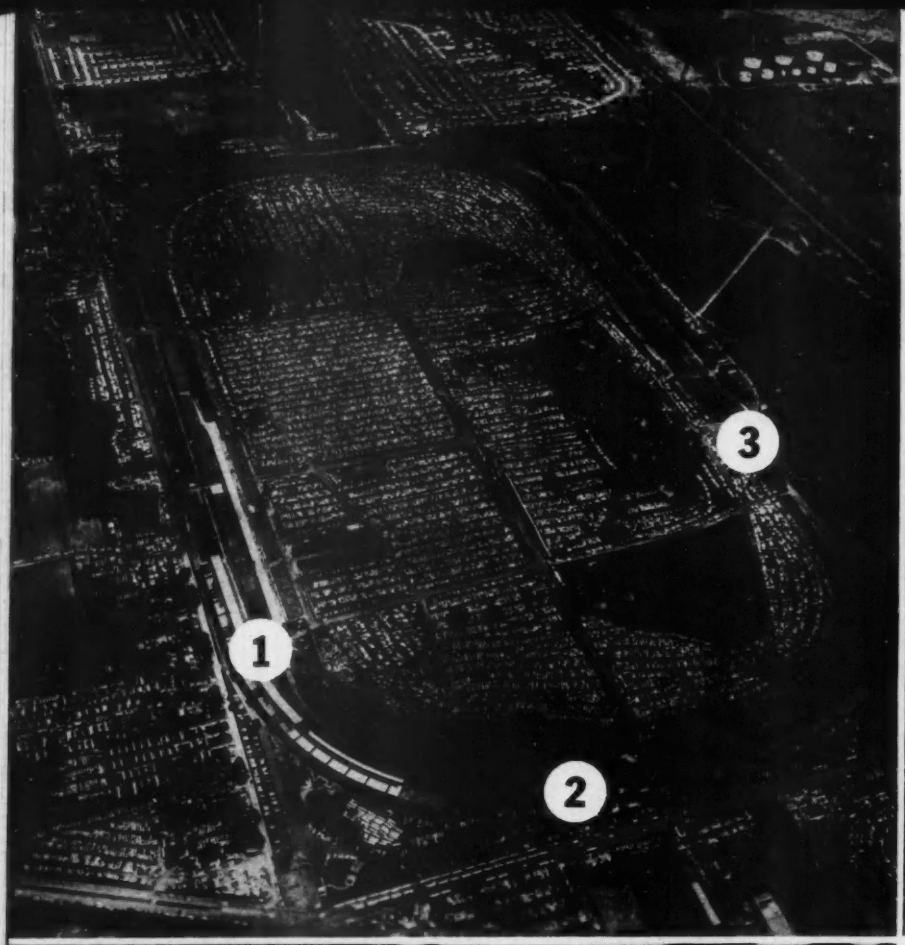
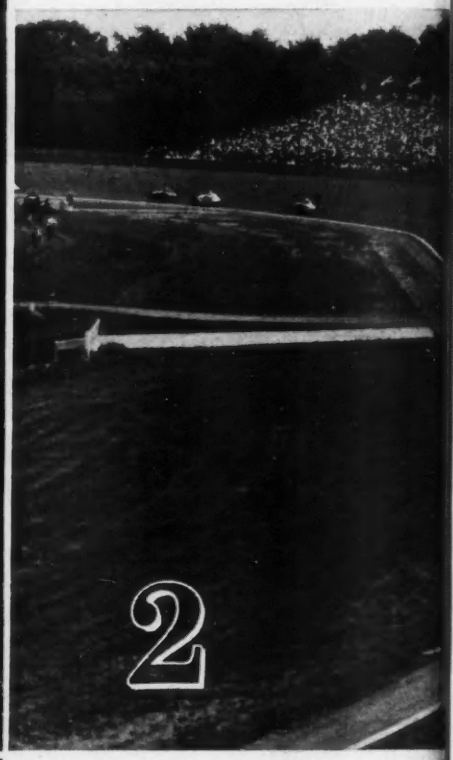
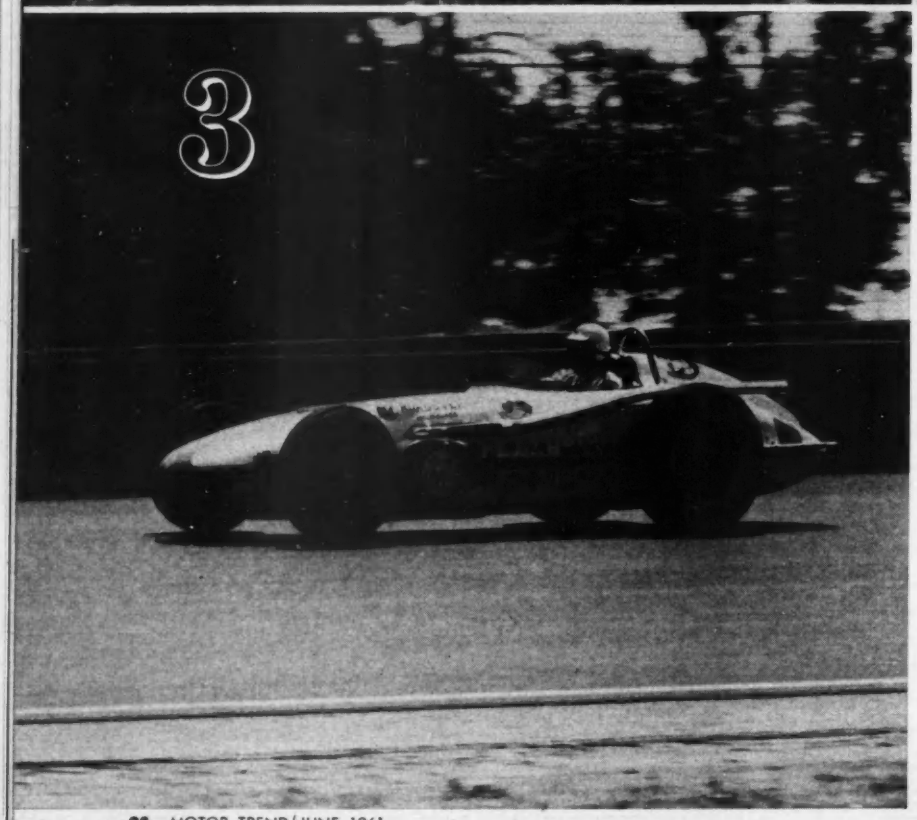
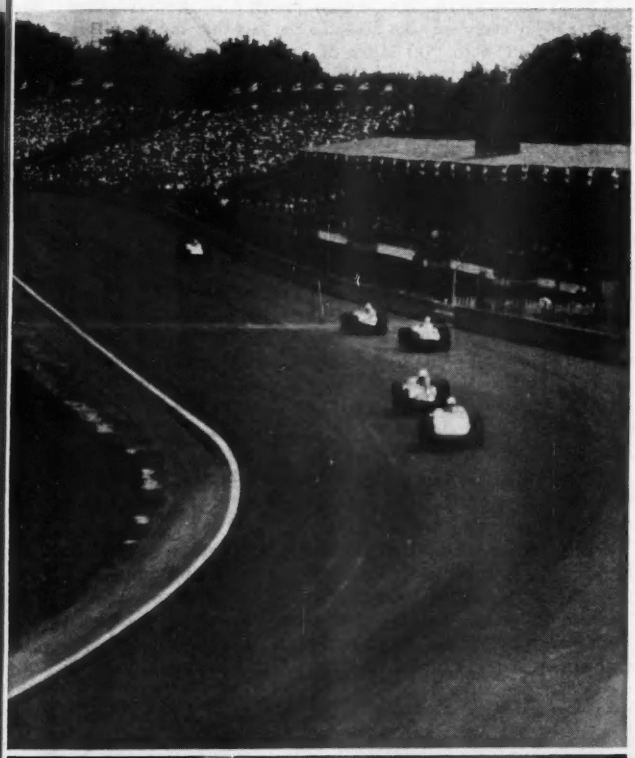


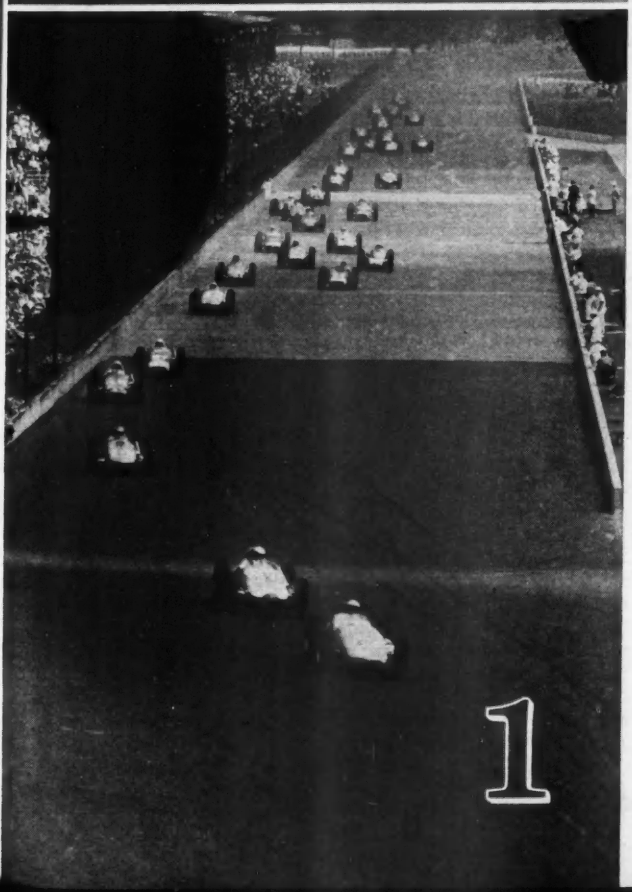




DRIVING THE BIG OVAL

The maxim that auto races are won or lost in the turns is just as true at Indianapolis as on any European road circuit. Drivers at the Speedway try to follow an oval course around the somewhat rectangular track. Roaring down the main straight at the highest speed they can reach, they ride high and outside. About halfway between the starting line and the first turn, they ease off the throttle slightly and bring the car away from the wall toward the inside of the track (1). Then, they drift back out as they go into the short straight (2), diving inside again as the second turn comes up. Maneuvering through that, they are back at speed on the outer edge as they get about a third of the way down the back straightaway (3). It can be argued that shorter ways around the Indy circuit exist but none of them are quicker. The object is to make changes of direction and, therefore, of speed as gradual as possible.





INDY *continued*

those who just love the experience of participation in one of history's more memorable contests of speed and who can afford this luxury. They desire to be no more than also-rans. They staff their pit crews with in-laws and business associates and have an exciting, tax-deductible vacation in Indiana when the Midwestern year is at its jungle-verdant best.

While car owners are dispersed all over the U.S. their cars, practically without exception, are built in Southern California. The first step in preparation for the 500, then, usually is the purchase of a car there or bringing an existing car back to its builder for general checking out of the chassis and for possible improvements. This tendency for Indy race cars to migrate annually — like Capistrano's swallows — to the Los Angeles area is basic to a new development which is sure to have far-reaching effects upon car performance at the distant Speedway. This is routine dynamometer testing of Speedway engines, which is to say Offies.

Within living memory Champion has enjoyed the same monopoly — by the competition's default – in the racing spark plug field that Firestone has enjoyed in the field of racing tires. During the 1960 season Autolite determined to entrench itself deeply in racing and made very successful inroads in many branches of the sport using, as its big opening wedge, customer service on a fine and massive scale.

Last winter Champion, as one means of retaliation, hired the use of the facilities of Traco Engineering in Culver City and the services of owners Jim Travers and Frank Coon, the Rich Kids of Vukovich and Scarab background. Under this new arrangement any owner of a race car which uses Champion plugs may have full, free use of the Traco dyno. He may have the personal services of Travers and Coon or, if he likes secrecy, they will take a walk and turn the plant over to him.

Autolite already had retained the expert racing services of Bill Stroppe and Associates of Long Beach, which has an even more encyclopedic pro racing background. There Stroppe's dyno was made available to qualified Autolite users.

These are more important developments than they immediately may seem to be. Until this year the tuning of practically all engines for the 500 has been done on the track itself, during practice periods. Dynos have been used very little because they are scarce, because few are set up to receive the Offy engine and because they usually are difficult and somewhat costly to get on. Their new availability to race-car owners means that far more machines will arrive at the Speedway in approximately ready-to-charge tune, with much fewer bugs and with less likeliness of encountering failure.

At best, though, dyno testing of the Offy is not all that it could be. Excellent as the engine is, as stupendous the job it does, it is an old design that has been kept up with the times by means of superficial modifications rather than re-design from scratch. Thus, while a well-engineered, modern, high-performance engine can be run on a dyno for 100 hours at full throttle and full load it's taking a big chance to run an Offy for a full minute under such conditions. Maximum horsepower readings, which generally are quoted as being from 375 to 400 at 6,000 rpm, tend to be mere flash readings and the full benefits of dyno testing simply are not possible. Nevertheless, this year's field of engines will be the best prepared in Speedway history.

The track is opened for practice on May 1 and the first race cars and their crews begin to arrive in the suburb of Speedway, Indiana during the last days of April. Last year there were 66 cars that came to qualify and, as usual, many of these did not arrive until the last day or two of time trials. Such late comers are lucky even to get onto the track and one wonders why they bother to make the trip.

continued

INDY *continued*

As an arriving entry your first act is to register your car with USAC, show its metal-inspection (magnaflux and zyglo) papers and pay into the club's benevolent fund. The car then goes on the Bear Service rack for checking of its wheel alignment and general chassis condition. The car's tires need not be new but they must be inspected and found acceptable by the tire manufacturer's experts on the spot. Then the chief mechanic calls at the Mobil garage for fuel and the car is ready to commence practice.

Until about three years ago the general preference was for straight methanol fuel which is very clean burning, potent and, due to its cooling action, very kind to pistons and valves. More recently the trend has been increasingly toward the use of more potent fuel materials, particularly the nitrates. While these can be used in very high concentrations in extremely rigid engines they must be used very sparingly in the relatively flexible Offy, which already is being stressed close to its limit. Mobil mixes the fuel blend which the chief mechanic requests. The blend is kept in confidence but counsel as to its desirability is given to the mechanic by the fuel expert bluntly or tactfully, depending upon how well they know each other.

Factors determining choice of fuel are many. One is the engine's ability to dispose of the additional heat released by a hot blend. Another is the amount of additional pressure that the engine's reciprocating and rotating parts will stand. Another is fuel economy — not to save money but to save pit stops — and the nitrates are consumed very rapidly. In recent years, however, pit stops have been a function of tire wear rather than of fuel consumption, so the mechanic is free to concentrate on the performance characteristics of alternate fuels.

If the car's driver is at the Speedway for the first time he must undergo a physical examination before he is allowed on the track. His vision, heart, nerves and reflexes are checked and any conditions are looked for which might be dangerous in a race car at speed. A driver who has run at the Speedway before is free to begin practice immediately, but he may not attempt to qualify without also undergoing a medical exam.

From May 1 until the last day of qualifying there is practice from 9:00 AM until 6:00 PM except when qualifying attempts are being made. There is no limit to the number of machines that may be on the track at once during practice, and 40 is not uncommon. It is into this melee that the rookie driver is sent to take his driving test, which determines whether he will be permitted to attempt to qualify. He is sent out on the track with all these other machines deliberately so that he can accumulate experience driving in high-speed traffic.

The rookie is required to drive 10 laps in each of four speed ranges, a total of 100 miles. This year the maximum test speed has been raised to 135 mph, which also is the minimum qualifying speed. The rookie starts out with 10 laps at 120 mph, then 10 more at 125 and another 10 at 130. He is allowed only two of these 10-lap sessions per day and is allowed to miss the target speed by four mph on the high side or one mph on the low side; if his deviation is beyond this five-mph spread his test session does not count. Through the 130-mph test session his driving has been timed and checked by USAC officials for consistency and safety but his final, 135-mph 10 laps are observed by seven veteran Speedway drivers. They must pass on his ability and sign for him if he is to try to qualify. Many rookies do not make it and, realizing that they are not ready for the track, retire voluntarily before reaching the maximum-speed test session. The track is cleared of traffic for each rookie's fourth, final test stage.

Until about five years ago it was usual for car owners and mechanics to frown on new drivers. At that time is was possible for a good man to take 10 or 15 practice laps, qualify and run well in the race. The stock objection to the rookie was, "You've got to wear the car out with his driver's test, then let him build up his speed, then let him qualify." With speeds what they are today everybody has accepted the fact that any Speedway driver needs 150 to 200 miles of practice regardless of *who* he is. That goes for the best.

There are four days of time trials or qualifying — two weekends — which this year fall on May 13, 14, 20 and 21. What transpires on these fateful days is full of meaning for seasoned observers. From performance during practice it's easy for a trained hand to spot 25 or so cars that never will make the race. Having watched qualifying as well, a good man can pick the first five or so finishers in the 500 with good accuracy, although the sequence in which they will finish still is largely up to fate. There is nothing uncanny about these predictions, and the clues all are blindingly clear to the sensitive observer. There are many factors which he learns to perceive and evaluate, more or less instinctively, as an overall total or combination. These include:

The driver and his history. His skill and determination. His stamina; it's one thing to qualify brilliantly and another to charge for hours.

The machine and its history. It is only as good as:

The chief mechanic and his crew. Their sharpness, thoroughness and, at least equally important, the harmony of their relations with each other and with driver and car owner.

One of the most significant clues to performance in the race itself is the time of qualifying, proof of this being that in the last 15 Indy classics 11 winners have been first-day qualifiers. This is merely a by-product of superior preparation, the single word which best sums up what it takes to win. In racing, the best preparation can be described as the best anticipation of both the expected and the unexpected.

Obviously the best prepared cars are among the first arrivals and are the first that are ready to qualify. Racing crews have become increasingly smarter in this respect and last year 22 cars qualified on the first weekend of time trials. This left only 11 starting positions to be fought over by 44 entries on the final, hectic two days of qualifying.

There are many advantages to early qualifying, none to being late. One is psychological. Drivers who have their starting position in the bag as of the first weekend can then relax completely while their less-fortunate counterparts still must hang in suspense. Another advantage is that, after qualifying, each car must be torn down *completely* for inspection and for possibly needed repairs. Between the final day of qualifying and the day of the race the track is closed, except for an intermediate period of four hours during which qualified cars may run tire and fuel checks. The crews of cars that have qualified in the first weekend have about 10 days in which to go through their machines with unhurried thoroughness. Those who qualify late have to rush in order to take advantage of the final four-hour period and many never make it.

In addition to general inspection there is another necessary reason for post-qualifying teardown. This is because qualifying is all or nothing. Everyone wants the highest possible qualifying speed as insurance against being bumped (explained below) and because it gives him the best possible starting position. Therefore the cars are set up for qualifying very differently than they are for the race. Qualifying is a four-lap, 10-mile sprint. The race is 200 laps, plus two pace laps and, usually, a final safety lap . . . a total of 507.5 gruelling miles. So for qualifying many special setups are used: usually a minimum amount of fuel in the tank and a special qualifying blend at that; special final drive gears; pistons which give a higher-than-normal compression ratio; even special camshafts. All this must be undone and restored to normal before the race.

Bumping, just mentioned, is the terror of all marginal qualifiers. The race is open to the 33 fastest qualifiers but, after 33

have qualified for the race by exceeding 135 mph, anything still can happen. When a qualified car ceases to be one of the 33 fastest it is forced out of the starting lineup automatically and all qualifiers farther back in the field are moved up one notch to fill the vacant spot. The effort to bump one's way into the starting field contributes to the frenzy of the final weekend of qualifying, and a bumped driver still may climb into another car and gain a starting position.

Fear of being bumped also contributes to the fact that the race is not always between the 33 fastest cars on the premises. A driver who laps at 143 mph in a qualifying attempt may feel that this is not fast enough for safety and decline to make this official. He hopes to go faster at a later date but may be prevented from doing so by unforeseen events, and a slower car will slip into the lineup.

Only during qualifying does a driver have the track to himself. Some revel in this, feel that if you're going to let everything hang out this is the safe, easy way to do it. Others feel uneasy and self-conscious about being out there all alone. Some drive at their best when they have another car to follow. Consequently, performance in qualifying is not an absolute indication of how a driver will perform in traffic.

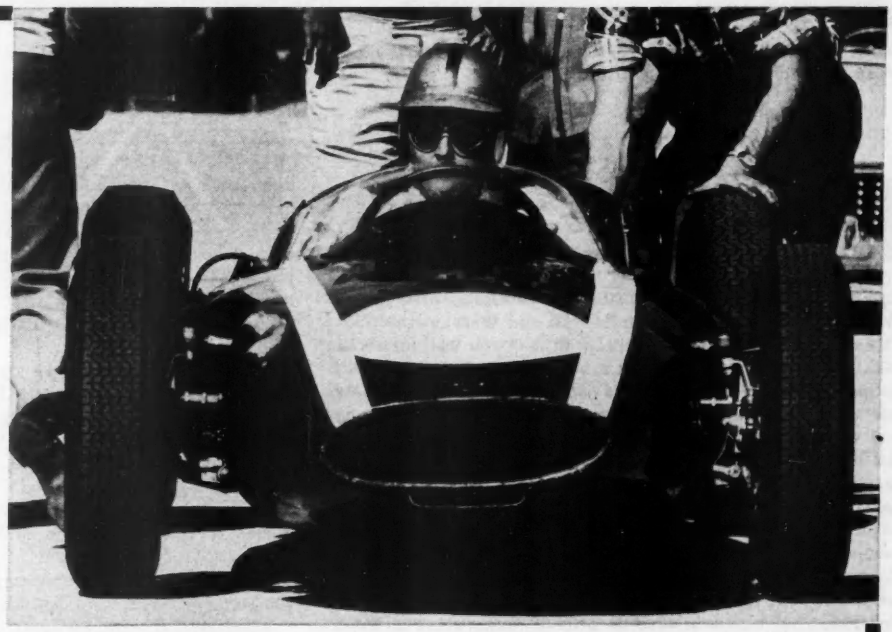
In recent years qualifying at the Speedway has been recognized by the public as a spectacle as exciting as the race itself. In fact during last year's first weekend of qualifying the crowds in the stands along the main straight looked just like those of race day and ran in the vicinity of 125,000! It *is* a tremendous show. First there is an hour of practice and there may be more race cars in the pits than on race day itself. Excitement is intense when the first qualifiers report to the starting line because everyone has seen them going very fast and knows that they are going to storm. They do; invariably the first few will go two or three mph faster in qualifying than they did in practice. During this first weekend new lap and/or four-lap records usually are set and the pole position is battled for. After the first wave of qualifying attempts the track is opened for practice again and remains open until one or more other drivers elect to take their time trials. The final days of qualifying are equally exciting because of the frenzied suspense and the larger number of cars struggling for a smaller number of starting spots.

While mechanical setups differ considerably between qualifying and the race, driving techniques remain the same. For each driver there is just one fastest way around the track; last year Rathmann and Ward drove — for all practical purposes — as fast in the race as they did during time trials.

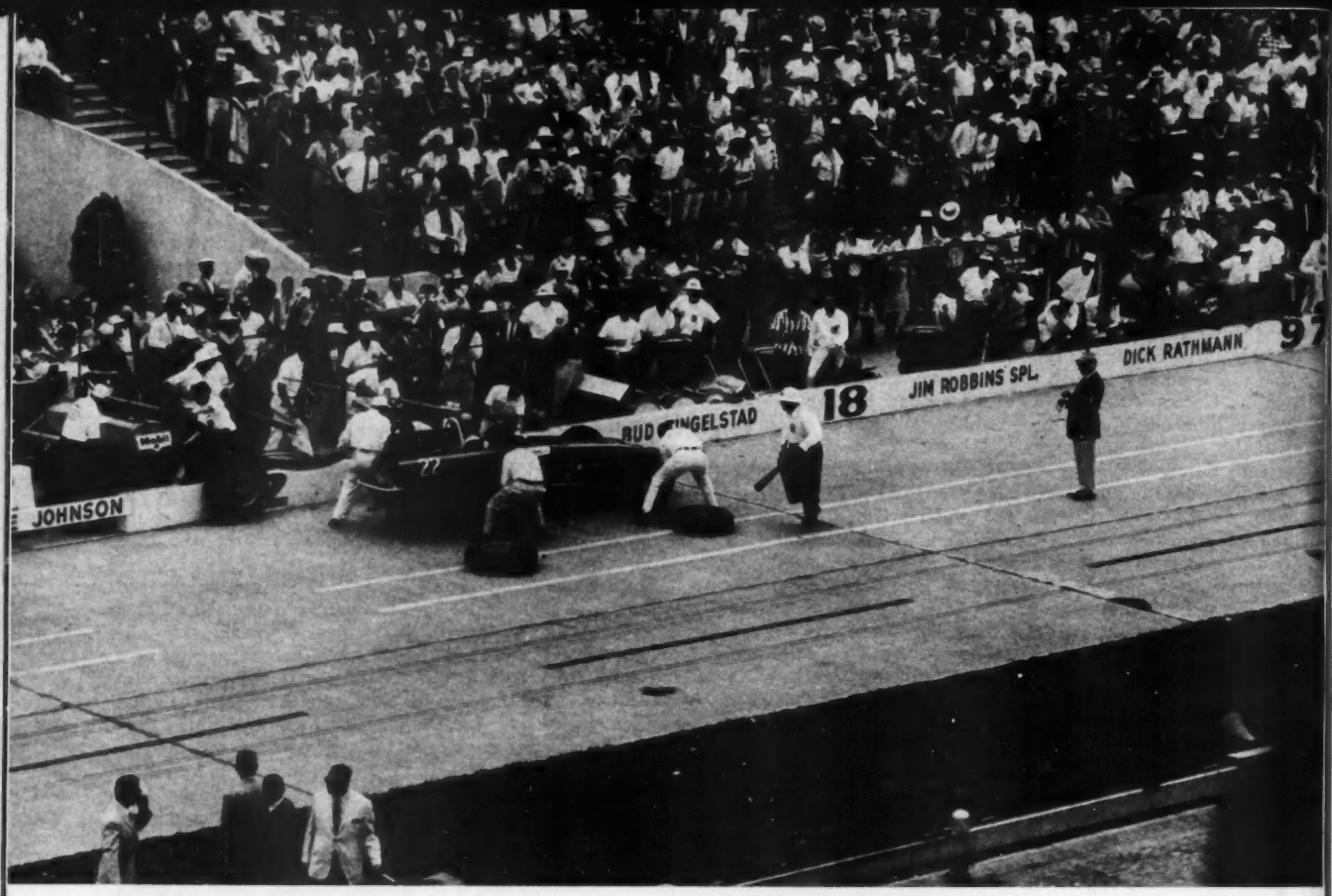
All drivers at the Speedway use basically the same method of negotiating it: although it is rectangular in form they follow an oval-shaped path or groove. The fastest way through any corner, anywhere, is to enter it at the outside, cut across to the inside and exit at the outside. This amounts to the straightest possible line through the turn.

The Speedway track is only 50 feet wide on the straights and 60 feet wide in the turns. This is a narrow course and all of it is used by all the drivers. They blast down the 5/8-mile straights taching about 6600 rpm — 178 mph, using 3.60 rear-end gears. They tend to back off on the throttle earlier than generally is imagined . . . on the front straight it's about half-way between the starting line and the first turn. While they *back* off for the turn they do not *shut* off; they try never to let engine revs get below 4800 to 5000 (135 mph) in order to keep high on their torque curves, to keep their pulling power up. They take the turn in a full drift and about half-way through the

THE 1961 MYSTERY CAR



One of the most intriguing entries in this year's 500-mile race is Jack Brabham, World Champion from the International Grand Prix circuit, at wheel of a rear-engined Cooper-Climax. In the fall of 1960, Brabham brought a Cooper to the Brickyard and turned in lap speeds in the 140's, more than enough to qualify. What made his achievement particularly significant was that the tiny British car's engine had only 150 cubic inches, more than 100 under Indianapolis maximum. And Brabham was running on ordinary gasoline, not one of the special blended fuels used by actual competitors! Backed by the noted sportsman, former president of the Sports Car Club of America, Jim Kimberly, Brabham will appear in May with machine he used last fall, plus another with a bigger, possibly blown engine.



Quick action in the pits is very essential for victory since every second a car is off the track, it is slipping out of its official position. Good crews take less than 20 seconds to change three tires and add 50 gallons of fuel.

INDY *continued*

turn are hard on the throttle again. The controlled drift carries them within inches of the outside wall and then, on the 660-foot short straight, they go parallel with the outer wall for about 200 feet before drifting the next turn in the same manner.

Speed down the main straights depends not so much on how fast a driver accelerates on the straight, but on how quickly he gets off the previous corner. This has led to a trend over the last dozen years for drivers to back off for a turn sooner and to get back on the throttle sooner, blasting through more of the turn under power and leaping from it onto the chute. Typical cornering speeds during last year's race were right around 137 mph; fairly incredible.

There are phenomenal drivers. Last year rookie Jim Hurtubise set a new one-lap record of 149.601 mph . . . over two mph faster than the next-best time, in a speed range where an extra two mph is almost as unlikely as an extra 20 mph. Immediately countless theories were coined to account for the "different" driving style that made this possible. About these Jim says, "They're all exaggerations. They say I broadslide the turns. Ridiculous. I drive in the same groove that the rest do. I think I drive a little deeper into the corners and use the brakes a little harder. That's all."

Says Frank Kurtis, "Brakes are for the pits. Out on the track their value is psychological. They don't even begin to slow you down. It's the way Jim worked the throttle that made the difference. At those speeds the tiniest fraction of a second gained makes a big difference."

To an ever-increasing extent the 500 is won in the pits as well as on the course. The day of the fumbling 2½-minute pit stop is long gone. Last year there were many full pit stops during which three wheels were changed and some 50 gallons of fuel were taken aboard, all in under 20 seconds; one such stop was made in 17!

The limiting factor in pit stops still is the time it takes to change a wheel, and one of the biggest factors in these blurs of efficient action is the pneumatic jack which now is standard for the four corners of some chassis. These instantaneously-acting devices first were used at the Speedway in 1959 and are responsible for cutting a good 15 seconds from pit-stop times. Air in a hose at from 200 to 500 pounds' pressure is used to extend the jacks and when the hose is disconnected the jacks are snapped back by means of coil springs. It's to be hoped ardently that one of these springs never breaks during a race; the jack rod would drop, creating a bad situation.

Some of the very best crews deliberately are left incomplete until after qualifying, so that the best talent can be picked up from among the unemployed crews. The precision and decisiveness of pit stops now are so well understood by the race-going public that seats in view of the pit area are increasingly at a premium. It is now routine for tens of thousands of spectators to rise to their feet and, with one voice, cheer a crew that has just executed an outstanding pit stop.

Because of the economics of American track racing, innovations are the exception in this sport and imitation of success is the rule. However, the few leaders continue to test new ideas

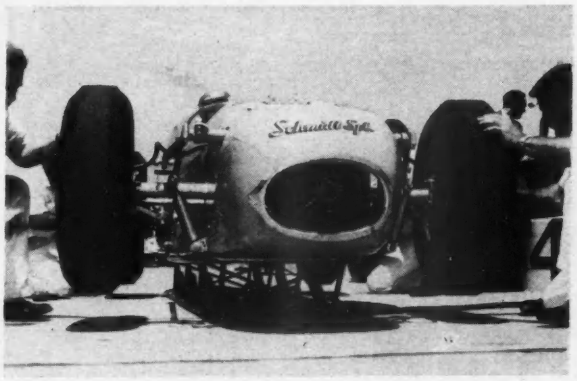
and there will be a few in this year's contest. Kurtis has built three new cars, to be driven by Chuck Hulse, Jack Turner and an un-named third. Their engines are tilted 18 degrees to the right to give a chassis-loading effect which is between the usual vertical and the George Salih-developed horizontal.

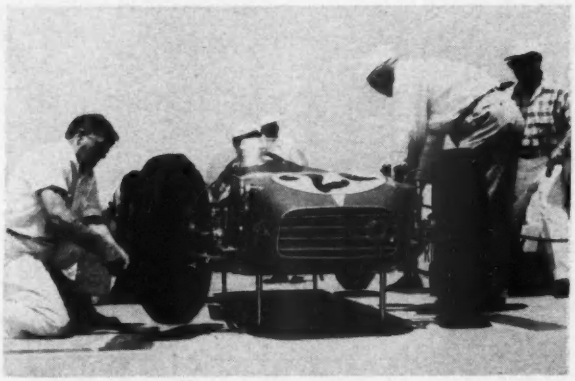
For Rodger Ward, successful innovator A. J. Watson has built a car with an ultra-light tube frame and solid axles which are sprung by coils rather than by torsion bars. For Jim Rathmann's mount Smoky Yunick has come up with a limited-slip differential. This can provide ultimate traction by eliminating the dragging of one driving wheel in the turns. And, again, power steering will be tried.

The most interesting American entry is a John Zink Special which Troy Ruttman is to drive. It has been designed to receive both an Offy and a gas turbine engine but latest reports are that time will not permit taking the turbine route this year. In either case, the location of the powerplant at the rear will contribute interest and should contribute knowledge.

The Cooper Climax entry, of course, will win a fortune in attention and publicity if it does nothing in the race. Already, however, it has given Indy old-timers a lesson they never will forget. Last October FIA World Champion Jack Brabham toured the Indy oval in this 150-cubic-inch machine, running gasoline for fuel. He cut a lap at 144.8 mph, which would have placed him eleventh among last year's qualifiers had he done four laps at that speed. He is officially entered for this year's race with the same car (modified to 167 cubic inches) and with a newly-built Cooper in reserve which has been tailored to the Speedway's unique requirements. Since he can go to hotter fuels and, because of his car's small displacement, to supercharging, his last year's lap times are only a beginning.

Before a car is allowed on the track for qualification attempts, it undergoes a thorough safety inspection. Condition of the chassis is checked with especial care.





Special jacking systems to expedite tire changes during pit stops are used by most entrants. Platform type (top photo) is kept in pits while built-in piston jacks (bottom) are quicker but add to the car's weight.

But all will not be easy for Brabham. Although he turned 144, plus, he was two seconds slower in the chutes than typical Offies, meaning he was making his time in the turns. But his fast time was made on sticky but fast-wearing, road-racing Dunlops. In the 500 he must run a much harder tread compound, and this will cost him cornering speed. The Cooper has independent suspension, which may be fine for adhesion but is not the answer for tire wear. It was found at Indy years ago that the best tire wear results when a car's tires are maintained at right angles to the pavement at all times. With independent suspension, camber and chassis-track dimensions fluctuate constantly, which leads to accelerated tire wear and to more pit stops.

Finally, there is the matter of torque, gobs of which enable the hulking Offies to maintain high lap speeds without shifting gears. Brabham's lap times were impressive when he was on the track alone. But what will they be when he has to run in traffic? When conditions ahead of him are crowded and he has to lift his foot momentarily, will his small engine have any pulling power left when he hits the throttle again? Not enough, probably, and therefore his car will run a three-speed transmission with second cog for offsetting this handicap. But the tiniest fractions of a second are decisive in this 500-mile trophy dash and the man who is changing gears in addition to watching tire wear, traffic, instruments and pit signals is going to be busy indeed. Brabham has a marvelous mount and the surprise of last October may be hammered home this Memorial Day. If so, it will have been well earned. /MT

RUMORED PHOTOS OF A 1957 PROTOTYPE GIVE THE WORLD ITS FIRST VIEW OF FRONTAL STYLING OF THE NEW VW 1500.

Motor Trend presents the first COMPLETE picture report on...

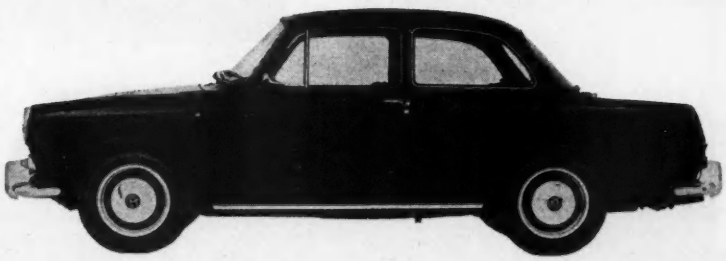
THE NEW VOLKSWAGEN

Photos by L. Ojeime

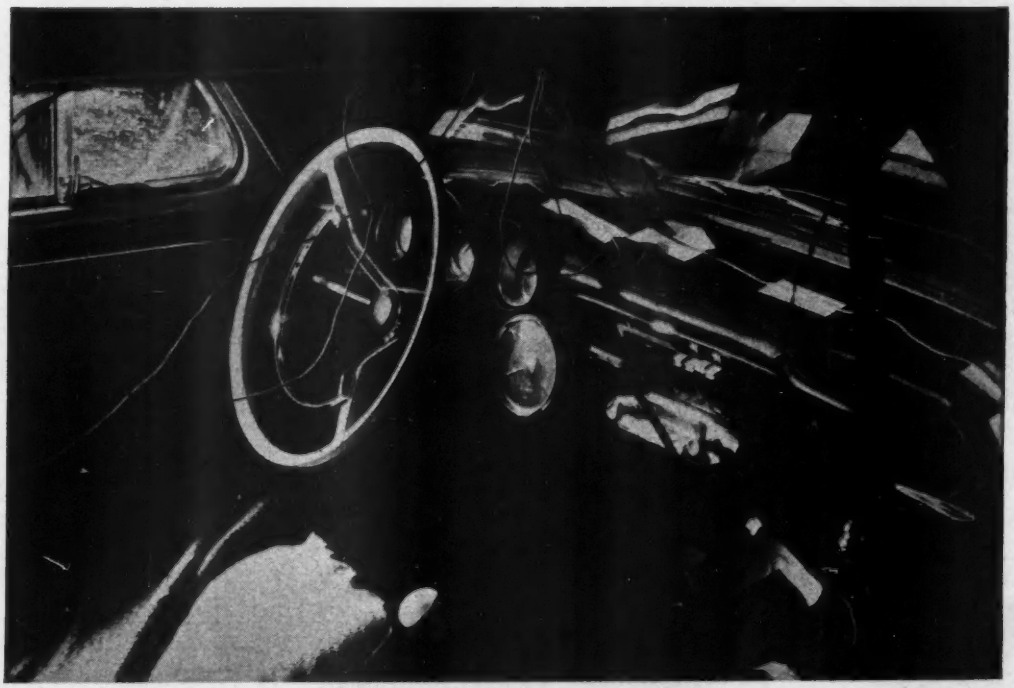
A SMALL, BLACK SEDAN dashed between the snow banks on the deserted country roads of Sweden. Except for the facts that it lacked any identifying markings and its cargo included a spaghetti-like network of testing cables and meters, it attracted little attention as it passed through the tiny villages. Inside the car, the German test crew was confident that its mission was being carried out in complete secrecy.

But, as the photos on these pages reveal, all eyes (and cameras) were not turned away. These exclusive, unposed pictures give American readers their first real look at more than a silhouette of Europe's most important and best-kept automotive secret, the new Volkswagen 1500.

After years of rumors, the first official confirmation of the existence of a new VW was made just a few weeks ago. That development was reported upon in last month's MT and the authorized factory photos were shown. Those two pictures, two retouched side views of a two-door



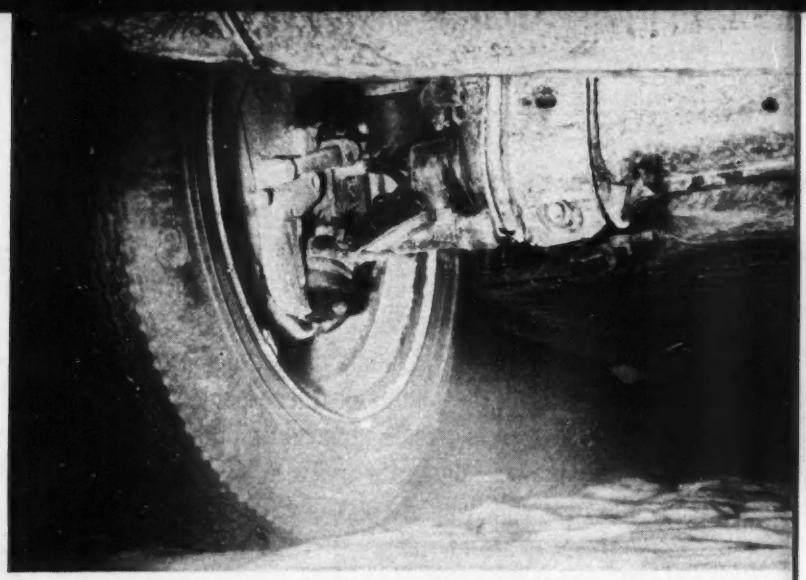
The official Volkswagen photo of the new 1500 left many questions unanswered. The car's most distinctive styling points are at the front and rear. The pictures eleswhere in this report tell the full story.

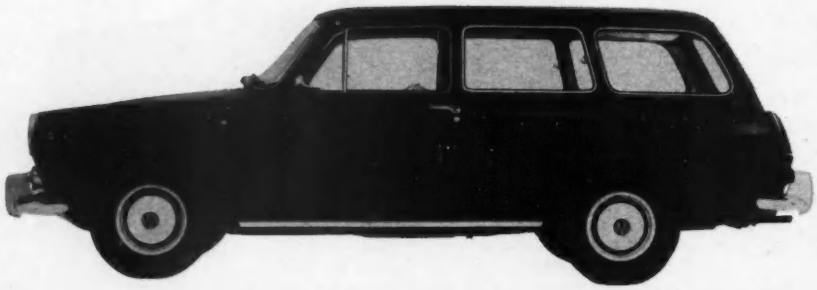


Somewhat hidden by tape and wiring of test equipment, interior styling of the VW has elements of luxury unknown in current versions of Volkswagen. Note leather trim, grab bar, increased instrumentation.

sedan and all-new station wagon (both photos are reprinted on these pages), left many questions in the minds of enthusiasts. What were the front and rear configurations? What was the engine's size and exact location? Were there many refinements on the inside? Most of these points can be answered by a careful study of these photos of the test car.

Since this mud-covered test car was obviously a pre-production prototype, many minor points of trim and style can and obviously will be changed before the car goes into final production. But we can be almost completely certain that those changes will remain minor, since very re-





Front suspension of the bigger VW (above) is independent with torsion bars. Station wagon version (left) as announced by factory has strong resemblance to Corvair Lakewood. Rear shot (below) of the 1500 prototype was taken in the Swedish back country as the car was undergoing its final testing. Reports are that this process has been completed and production will begin before 1962.

liable sources report that the car has passed all of its final testing and production will begin before the end of the year.

The most important development within the new VW 1500 has gone unmentioned in the official company announcements. The engine, naturally located in the rear, is of a new design that makes it extremely adaptable to more efficient placement. The cooling fan is situated horizontally over the engine, as on the Corvair. This cuts down the overall height of the whole powerplant package to approximately eight inches! The engine thus becomes an under-floor unit. There is storage space in both front and rear trunks.

One source, close to Volkswagen, described this new engine as a "suitcase" design. This is a whole new concept of engine size and placement, which considers the powerplant a flexible package that can be moved into new positions and create more room for passengers and storage. The results of such an engineering breakthrough could be cars of the future with engines located under seats or in fender areas.

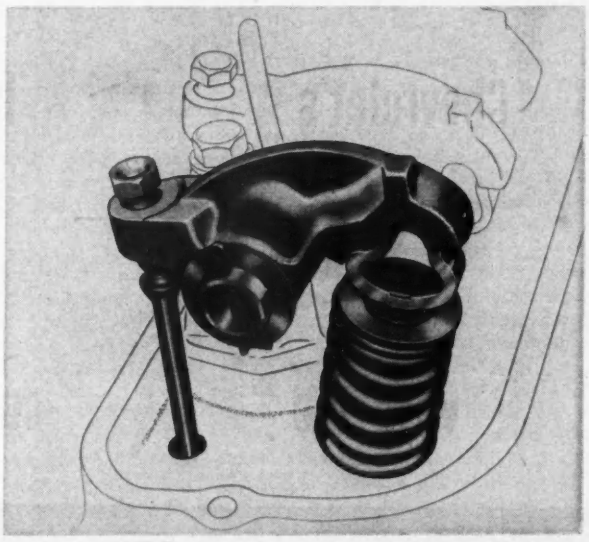
The basic engine components and principles are much the same as those on the current VW's. Displacement of the flat Four is 91.5 cubic inches, as compared with the current sedan's 72.7 cubic inches. The engine, rear axle drive and gearbox are designed as one unit. The four-speed full-synchromesh box is operated by a floor-mounted shift located between the two front bucket seats.

Up front there is independent suspension with torsion bars, while a swing axle does the work at the rear. Brakes, front and rear, are of the conventional drum design.

American eyebrows were raised quickly when the new station wagon styling was revealed. Quite similar to the Corvair Lakewood, the 1500 wagon is a logical shape for a vehicle with its purpose, and the sloping VW hood will do much to give it styling distinction.

There are rumors of another special shape in the planning stage for the 1500. A special coupe body, with more graceful lines and a lower profile than the sedan, has been seen on the Volkswagen test tracks. More closely related to its four-seater counterpart than is the Karmann-Ghia to the current VW sedan, this new sports coupe could well be Germany's answer to the Monza.

The official Volkswagen policy that the new car will not be marketed in the United States remains firm as of this report. It is obvious that this will be the case until such time as the happy sales picture of the current model should weaken. When and if that happens, the 1500 will join the familiar beetle-shaped sedan in U.S. showrooms. It is estimated that its retail price would be in the area of $2100. /MT



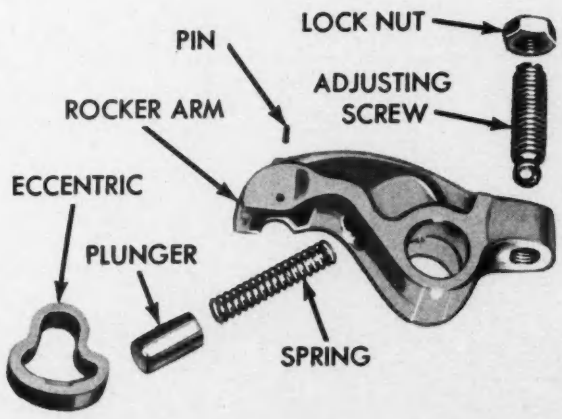
FORD'S NO-LASH VALVE TRAIN

Smoother, quieter valve operation is a feature of Ford's latest 223-cubic-inch, six-cylinder engine.

Valves with mechanical lifters normally require frequent adjustments for wear and the setting must allow for heat expansion. As a result, some lash occurs in the valve train and can cause an annoying tapping sound, especially when the engine is cold.

Ford has a new answer to this problem, an eccentric attached to the rocker arm and wedged against the valve stem by a spring plunger within the rocker. The action of the plunger keeps the eccentric in constant contact with the stem, despite wear or heat, eliminating the source of noise. Adjustment is still required, but much less often.

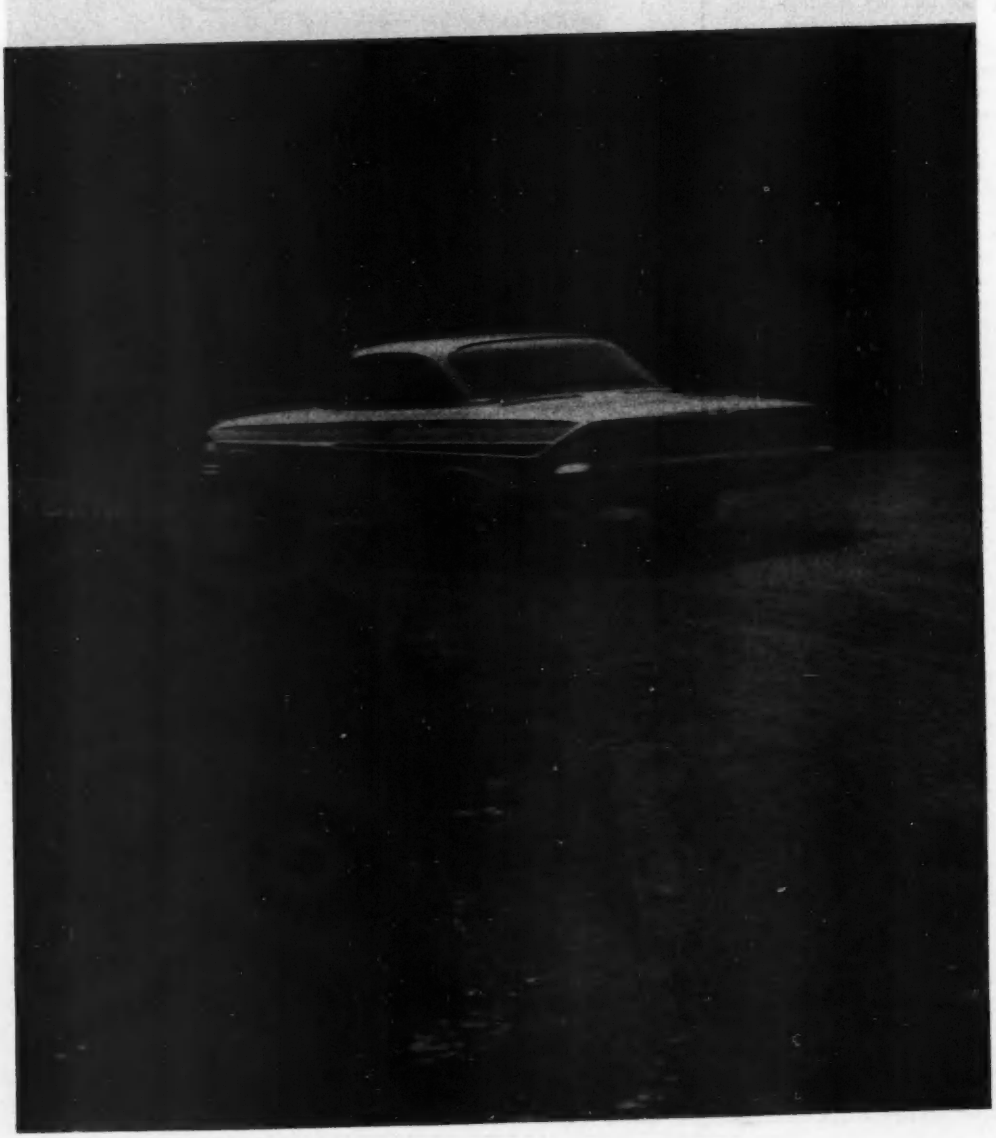
Originally scheduled for all '61 Ford Sixes, the device has just been adopted as a running change. Unofficial sources indicate the delay was because of minor lubrication difficulties, now solved, where the eccentric pivots on the rocker arm.

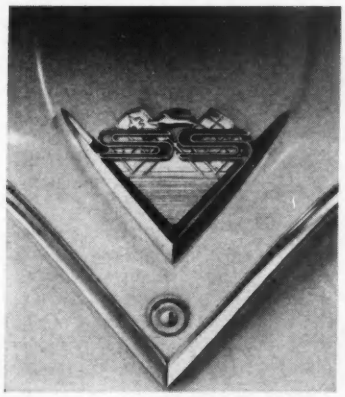


Chevrolet's NEW Impala

Super SPORT

with the 409-cubic-inch-engine





by Bob Ames

WITH ALL THE NEW VERSIONS of Detroit cars being introduced this summer, a lot of car enthusiasts might think that Chevrolet's new Super Sport falls into this classification. To be truthful, however, the SS package is a kit for the Impala, and Chevrolet is quite accurate in calling it so. But don't misunderstand the word "kit," as I did until I sat behind the wheel of a new Super Sport. This SS had a four-speed transmission, and when I floored it in second I got the impression that Chevrolet had made a mistake in labelling this car a Super anything – they should have called it the Incredible Impala!

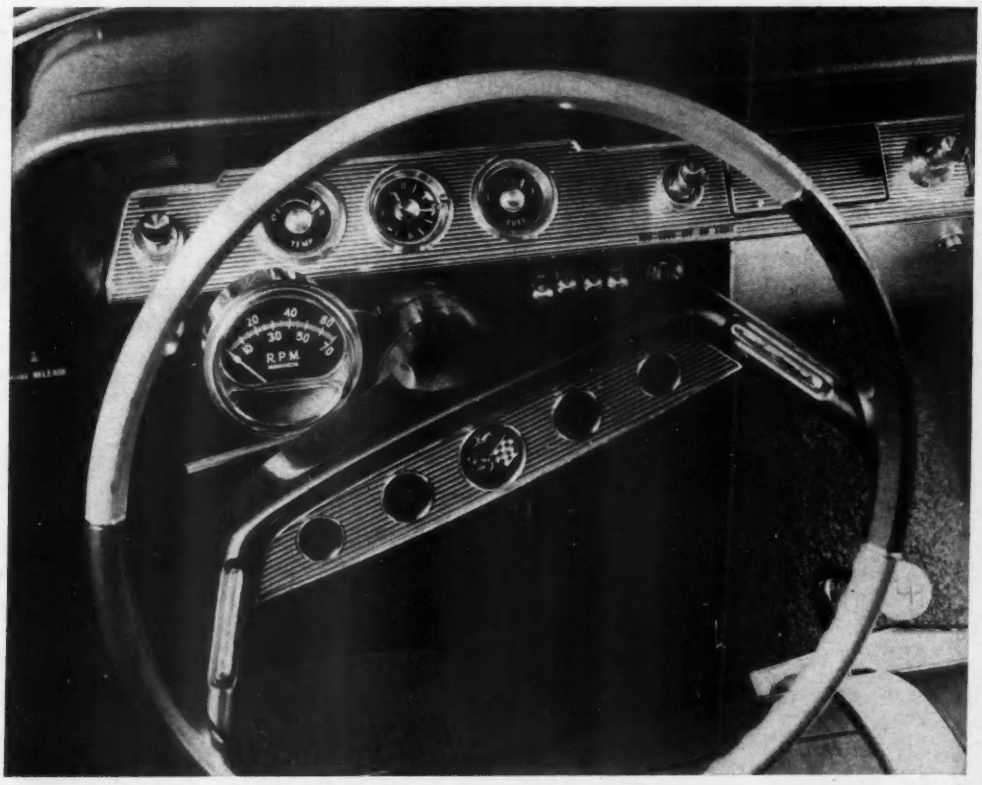
Performance is the shibboleth for the Impala SS, and all five of its engines are potent powerhouses. Just how potent is shown by the record turned in by one of the first 360-hp engines delivered to the West Coast. This Chevrolet won in its class at the 1961 Winternationals held in February at Pomona, California. The ET was an amazing 13.59 seconds for the quarter-mile, with a top speed of 105.88 mph. Just to prove that it was no mistake, the same car also recorded a non-official 13.19 seconds, 109.48 mph. These are eye-popping results for the first acid test of a new engine and are undoubtedly just the start of a long series of wins for Chevrolet's new Impala.

One of the more subtle—and equally as important as the performance power team options — is the list of extras that come with the Impala Super Sport kit. There is a special trim inside and out, padded panel, simulated knock-off wheel covers, power brakes and steering, and narrow-band whitewalls. But these items are just the frosting on the cake. The enthusiast will be far more interested in the 7,000-rpm tach, heavy-duty springs and shocks and sintered metallic brake linings. This makes it mandatory that the SS not only have the guts to perform well, but is safe to drive at the speeds of which it is capable.

Any Super Sport kit is available with five power teams: 305 hp with four-speed manual or heavy-duty Powerglide, 340 hp or 350 hp with a four-speed manual. These three engines are all modifications of Chevrolet's familiar 348-cubic-inch V-8. The biggest optional powerplant is a new engine: a 409-cubic-inch V-8 turning out 360 hp at 5800 rpm and 409 lbs.-ft. of torque at 3600 rpm.

The new 409-cubic-inch V-8 is basically a hopping-up of the 348, but it is the type of a hot rod job that few individuals would be able to do. This is mostly because the 348 will not accept the larger bore and stroke (although a few might) and Chevrolet engineers made changes in the core casting to keep the water jacket at a safe thickness. The 409's bore and stroke are 4.3125 x 3.50, as opposed to the 348's 4.125 x 3.50.

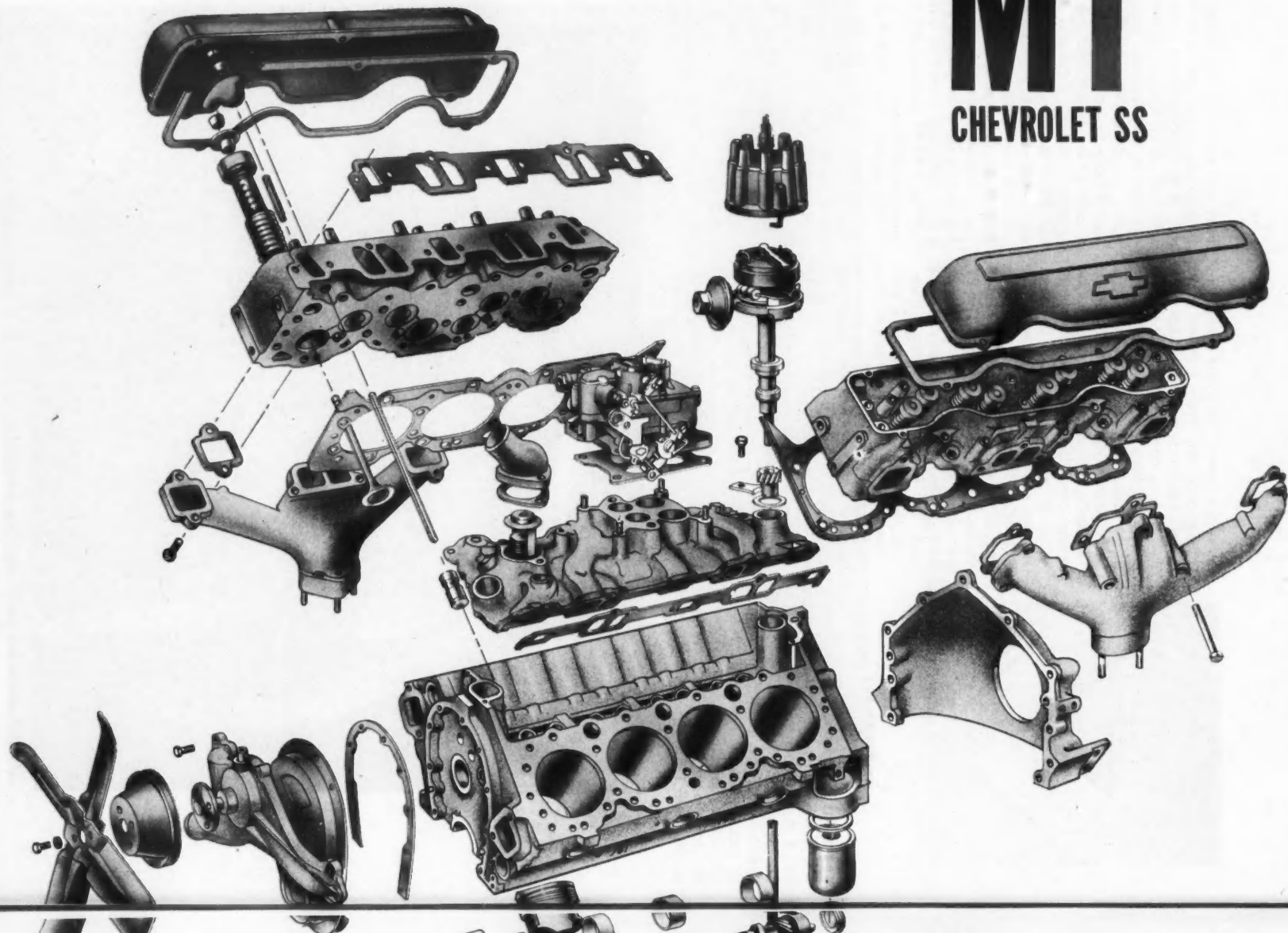
continued on page 42



STEERING WHEEL IS COCKED TO ONE SIDE HERE TO SHOW TACH; IN DRIVING, THOUGH, BAR HIDES INSTRUMENT.

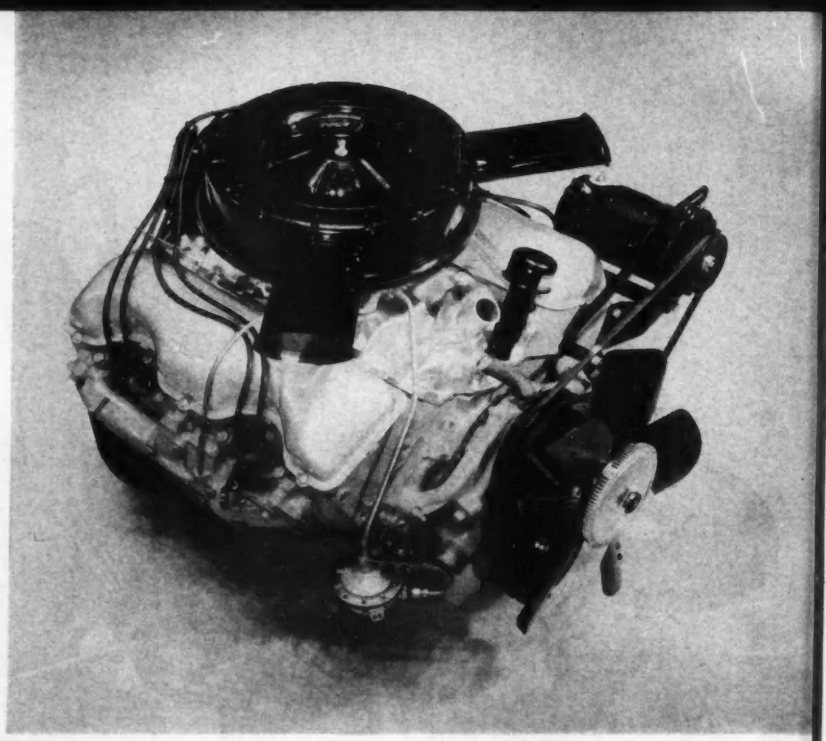
MT

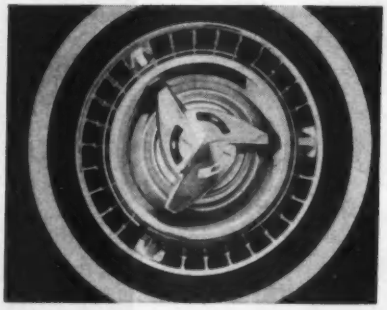
CHEVROLET SS

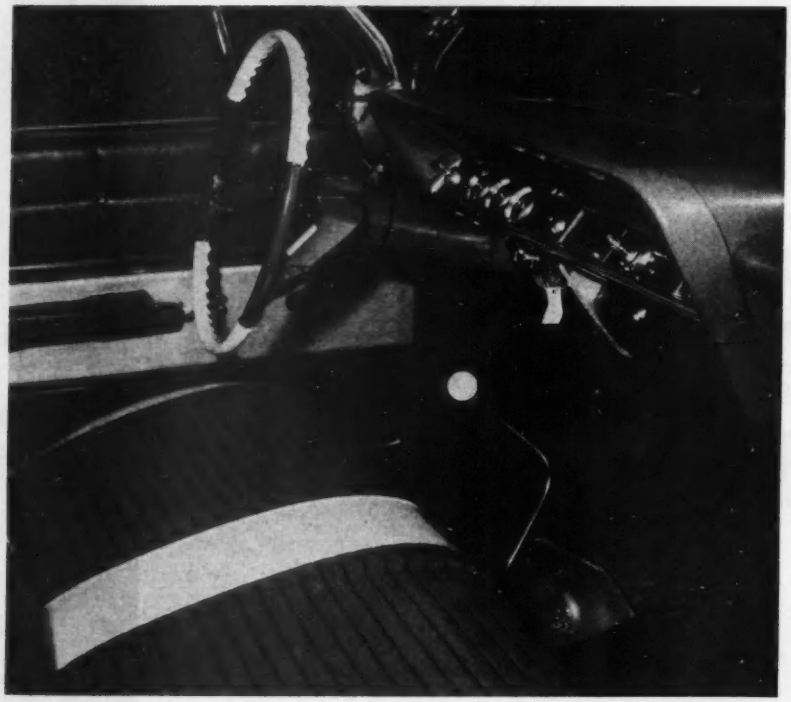


THE 1961 CHEVROLET 409-Cubic-Inch-Engine

Chevrolet's new Impala Super Sport gets its visual identification from exterior trim effects like the individualistic wheel covers and SS imprint over the crossed flags. New 409 engine will always be the identifying feature for performance enthusiasts, however.







CHEVROLET'S SUPER SPORT
continued

There are many other changes in the 409 — and some of these are going to present several interesting possibilities for modification-minded enthusiasts with a 348. The crankshaft is heavier, and a new type of bearing material is now being used. The pistons are quite different and are forged aluminum with a full-width valve relief cut across the top. The connecting rods are ⅛-inch shorter than those of the 348 but weigh more since they are more heavily built.

The cylinder heads are virtually identical, but the 409 has bigger holes for the heavier pushrods. The cam has been changed and the timing set to provide the greater air that is necessary at the higher rpm's. The performance potential of the 409 also required heavier valve springs.

The only carburetor available with the 409 is a Carter four-barrel. Both the primary venturi and throttle bore openings are larger than those found on this same carburetor when it is installed on a 348.

Besides the options listed for the SS kit, there are dozens of other interesting modifications that will be of importance to the performance enthusiast. Axle ratios, according to the AMA specs are 3.36 for the 360 hp and 305 hp (3.55 with Powerglide); and 3.70 for the 340- and 350-hp

Interior is little changed from a stock Impala. Floor-mounted four-speed shift is mandatory except on the smallest engine option.

engines. But enthusiasts will probably be familiar with the Chevrolet RPO's which go as high numerically as 5-to-1. Another important axle option is Chevrolet's limited-slip differential, Positraction. The car driven for this report had this option, and it must be highly recommended for all-out performance.

A mere reading of the specifications, changes and options is no preparation for driving Chevrolet's Impala SS. About the closest practical comparison that can be made is with a Police Special option that Detroit manufacturers (including Chevrolet) offer to law enforcement agencies. The SS will do everything that most of these cars will — and will do better than many.

Acceleration is sharp and so rapid that at first it is a little hard to believe. The car I drove had only four miles on the odometer, so an all-out acceleration was out of the question. But without trying hard, the SS will shoot away from practically anything else on the road. With the limited-slip there was absolutely no spin of the wheels — but with a properly broken-in and tuned engine, it would probably peel rubber at any speed up to 70 mph.

Handling is another area that will surprise the uninitiated, although those drivers who are familiar with an all-out performance machine will know exactly what to expect. Corners can be taken flat, fast and furious. Since the car was so new and the time limited, corners familiar to me were too far away to get to. But a flat, 90-degree, hard-topped corner is practically the same wherever it is. The SS will take these faster and safer than almost any stock sedan I've driven this year — and this includes representative versions of every car Detroit builds.

The Morraine sintered metallic brake lining and the heavy-duty brakes which are required with the SS kit came in for a lot of close scrutiny. There have been some complaints of cold weather fade with this combination. Chevrolet's engineering department feels that this problem has been licked, and the few tests I had time for proved this is true. If they work as well over a long period, these brakes should be given serious consideration by anyone who intends to buy a performance car.

I have one complaint about the Impala SS, and it is one that every enthusiast is going to gripe about. The tach, which worked smoothly and gave a precise reading, is located on the steering column post with a strap. The only logical place for it appears to be just above the spoke in the steering wheel. When doing any type of driving it is difficult to read, and on winding mountain roads where the Impala SS will be a marvelous car to drive, the wheel spoke will obscure it entirely from view. Since this is a time for a lot of down- and up-shifting, the fellow who likes to shift at precise points is going to run into a lot of trouble.

As for the trim, grab handle, wheel covers, etc., my own opinion is that they are rather flat. They aren't different enough to set the SS apart from a regular Impala, although they don't add a lot to the cost. For myself, I can take or leave this particular feature. For me, and for any true aficionado, the engineering guts are what count — and Chevrolet's Impala Super Sport is about as gutty a machine as can be bought over the counter today. /MT

THE NEW TEMPEST COUPE

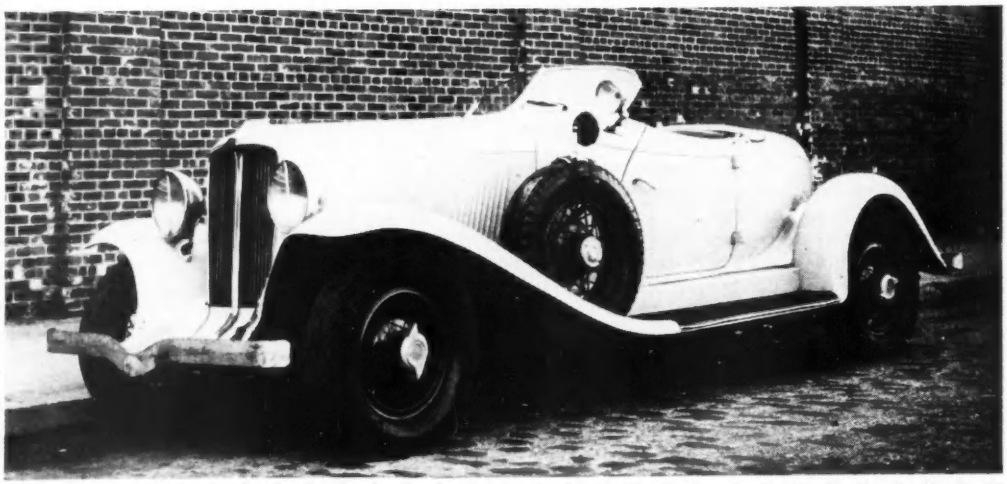
PONTIAC JOINS in the parade of mid-season new model announcements as it makes two new two-door coupes available in the compact Tempest lineup. Using the same coupe roof line that has been developed for the other GM compacts, the new Tempests will have identical exterior dimensions to the four-door sedan that has been in Pontiac showrooms since last fall. A lone exception will be a half-inch lowering of overall height.

The standard coupe, as pictured below, will have conventional bench-type front seats, normal Tempest interior appointments and a full-width rear window. A more deluxe version will have bucket seats in the front, deluxe carpeting and a special interior trim. A preview of the latter model was given at the International Automobile Show in New York in April. Called the "Le Mans," this high-styled coupe has a special cloth and vinyl-coated roof with a small rear window, similar to the Buick Skylark, pictured earlier in this issue.

Both coupes will be offered with the full range of four-cylinder Tempest engines with output ratings from 110 to 155 hp. The 155-hp aluminum V-8 is also a customer option. Transmissions now available are a three-speed, floor-mounted manual and a two-speed automatic.

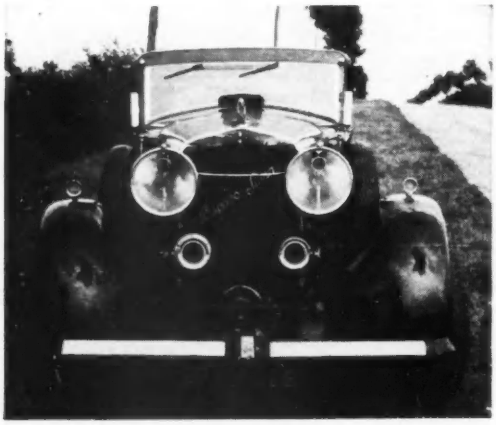
Naturally the Tempest's other unique design achievements, the transaxle and flexible driveshaft, are incorporated in the two-door versions of the MOTOR TREND "Car of the Year." /MT

True classics were distinctive in many different ways. Some were known for engineering design, while others achieved fame because of built-in luxury. This Auburn Boat-Tail Speedster stands out for body styling. Compare it with Fords and Chevys of the early 1930's and you will see why it is classified as a classic.



THE CLASSIC CAR REVISITED

By Robert J. Gottlieb



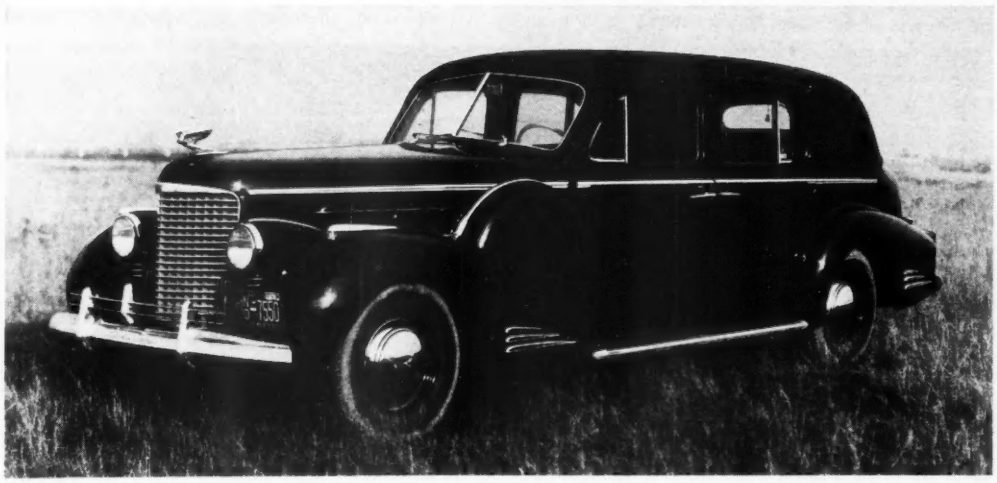
The Hispano Suiza is one of the finest classics ever made. Of French-Spanish-Swiss origin, this K-6 is powered by an aircraft-type engine. This car was restored by the author.

In the early 1950's we at MOTOR TREND were amazed at the interest being generated in a certain type of car. We knew that collectors everywhere were showing extreme interest in cars other than antique automobiles.

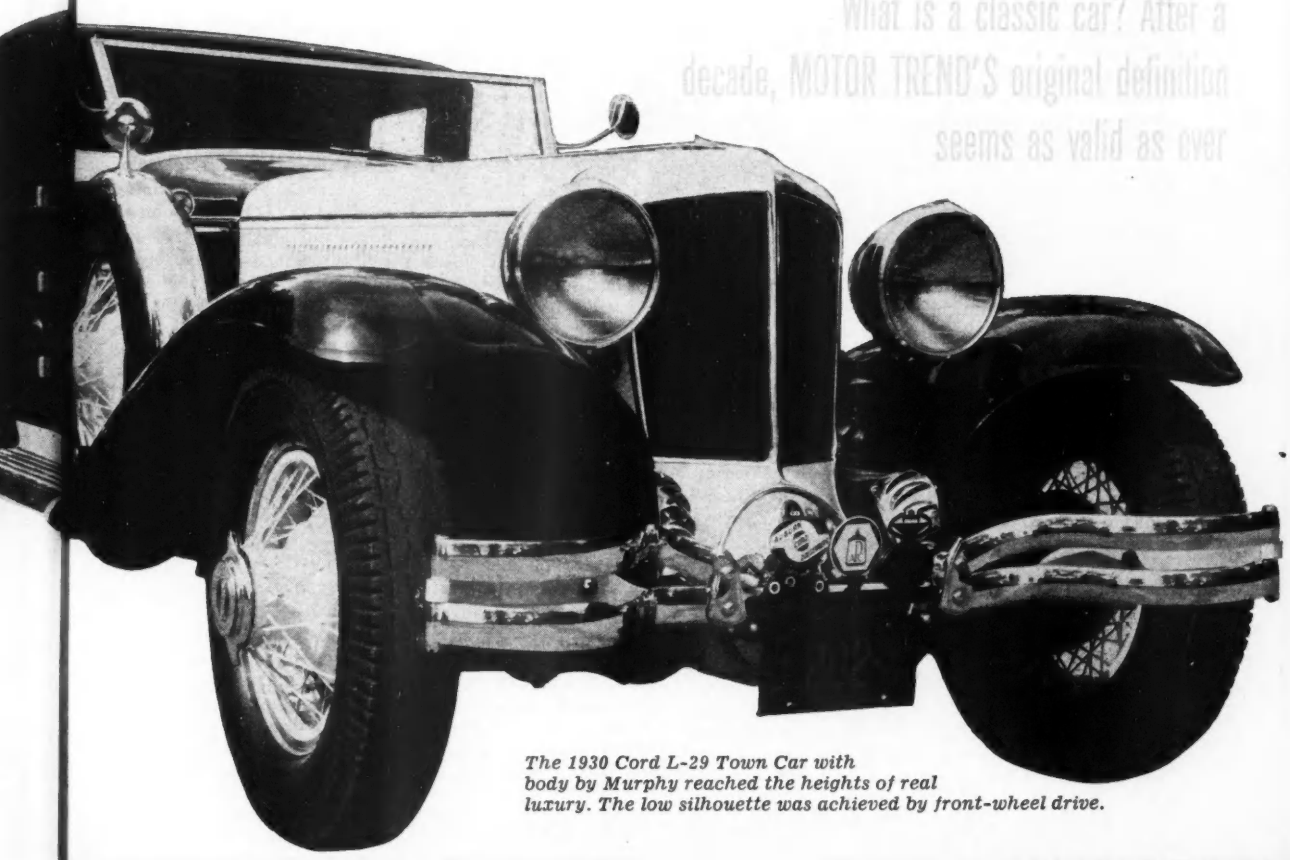
As the fever spread, we felt it necessary to investigate and to find out why particular cars had appeal, while others didn't. We then went out on a limb and defined the cars as "classic."

Now, after the elapse of a decade, it is interesting to go back to some of those early opinions and see whether they were correct and have withstood the test of time. *Continued on page 46*

Note the distinction and luxury of this V-16 Cadillac Town Sedan. Its powerplant was also classic. The complex engine displaced 431 cubic inches and developed 185 hp. During its time, the majority of cars bought by Americans were equipped with six- or eight-cylinder engines which had horsepower ratings in area of 85.

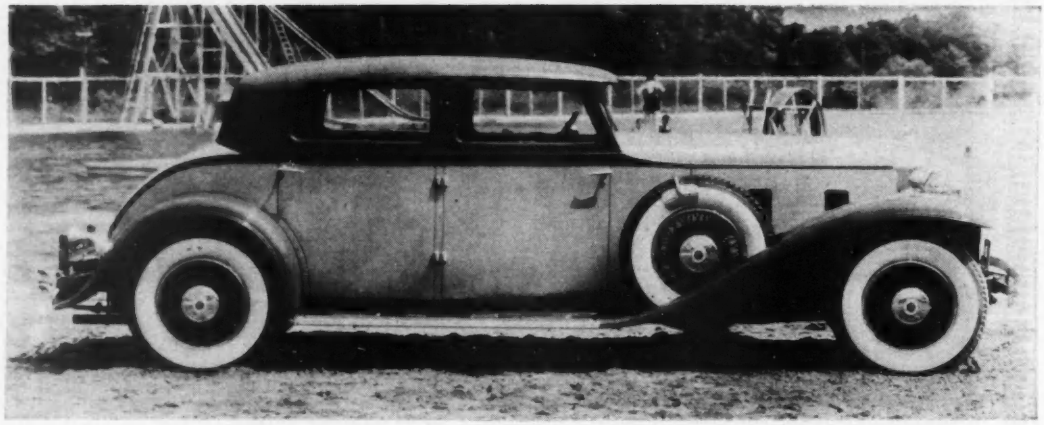


What is a classic car? After a decade, MOTOR TREND'S original definition seems as valid as ever



The 1930 Cord L-29 Town Car with body by Murphy reached the heights of real luxury. The low silhouette was achieved by front-wheel drive.

Weymann built this body for the Stutz factory, which did not have sufficient capital to engineer a 12- or 16-cylinder engine. At that time many said that you couldn't attract the public with a mere eight cylinders. Stutz countered this skepticism by designing 32 valves into the engine.



THE CLASSIC CAR REVISITED

Ten years ago, we framed this definition: "A classic car is a distinctive car manufactured with quality materials and superb craftsmanship. It is a practical car, outstanding in appearance, performance, dependability and utilitarian value. Though exceptions exist, it is usually a large, powerful, open body, luxury car that was manufactured from 1928 to 1937, and a model which was expensive in price and produced in limited numbers."

Now, there are many clubs composed of enthusiasts banded together with the classic as their primary interest. Membership in organized clubs mounts up in the thousands. The classic car lovers have ferreted out the cream of the crop, restored them, and cherished them with loving care. It is easier now to establish, by public opinion, those cars which are classic and those which are not. Bear in mind, however, that the number of cars of a given make is no criterion, because there are many models which are non-existent. In other lines, two or three examples may be in existence out of an original run of over a thousand.

The key word in the definition is "distinctive." There is a distinction between those famous cars belonging in the first-rank and ordinary cars such as the Chevrolet, Buick or Essex. Another word would be "different." Visualize the difference in quality, construction and appearance between a Duesenberg and a Hudson. One car was built for transportation and the other for prestige, comfort and luxury. One was ordinary; one was so deluxe that you couldn't buy anything better.

The true classic was the finest car that money could buy. It was intended to be much more than mere transportation, and it was. A pot-metal handle will open any car door; but think of one made of hammered silver. A rubber floor mat will insulate feet from vibration and heat; but think of one made of lamb's wool. Four or six or even eight cylinders will propel you to and from the market; 16 will do it in magnificent style.

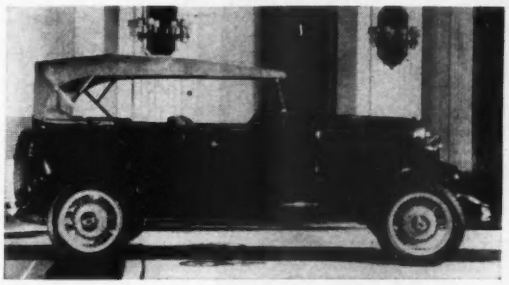
Every imaginable luxury was built into the classic. The finest silks, brocades and engineering known to man were utilized. A horsepower race was in progress. Those manufacturers who couldn't squeeze sufficient horsepower out of a given design, simply added cylinders. Think of the prestige acquired with 12 cylinders. The ultimate was 16 cylinders.

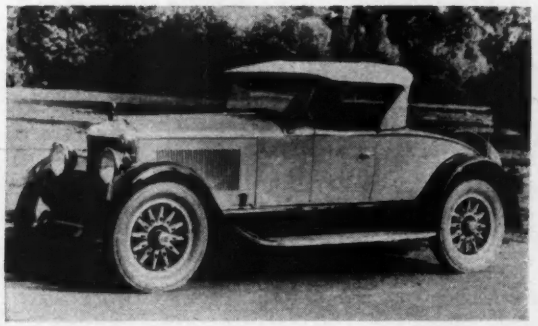
Craftsmanship was carefully maintained by continuous inspection. The most successful builders of classics were those who built a super chassis and then sent it out to a custom body builder for a custom body. Astounding success was achieved by such firms as LeBaron, Bohman & Schwartz, Willoughby, Rolston, Brunn, Locke, and Waterhouse, to name a few. Established prestige builders such as Bugatti, Hispano Suiza, Lincoln and Mercedes-Benz also had a field day. Their generally fine products were improved by the addition of the finest bodies that man could build.

Now that so many are actively engaged in the restoration and preservation of the true classics, you see the prestige-built Lincolns, Packards, Duesenbergs, Marmons, etc., at classic car meets everywhere. Convertible cars outnumber the closed cars by two to one. The open cars are, with rare exception, valued anywhere from twice to ten times the value of the closed cars.

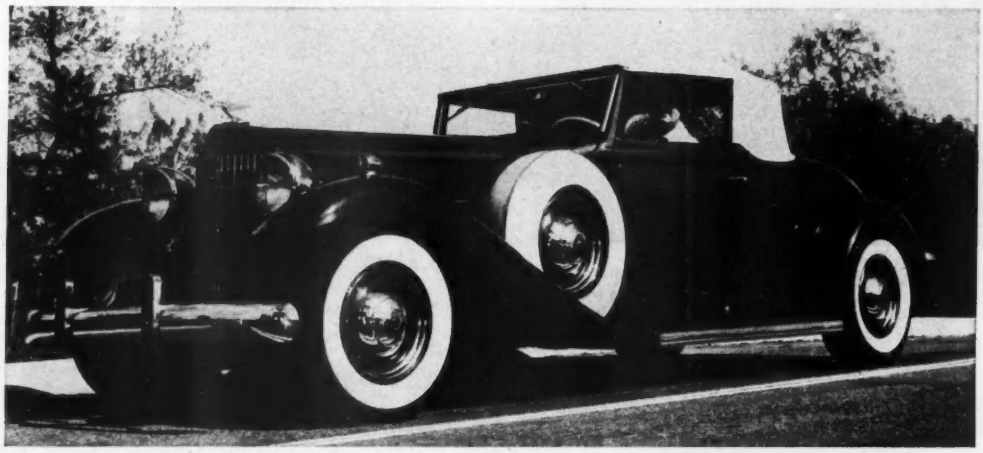
Those that aren't dependable or practical are either left at home or parked by the side of the road, half-way to the meeting place. The crowds revel at the exhaust noise of the powerful ones; the lesser classics and semi-classics hardly rate a second glance. By far the great majority of cars *were* built between 1928 and 1937. Most money and time is spent on those that present a well executed design and handsome appearance. Very few people invest in any form in tankers which are probably best described as recognized classics with closed bodies, which are not eye appealing. /MT

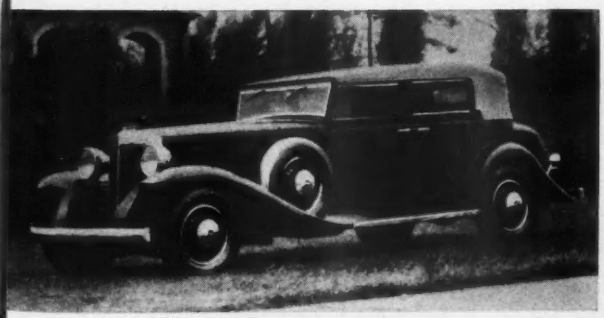
Diana built a good car (right) in the low-medium price range. It sought distinction in the radiator grille, but, since the car lacked power, prestige and beauty, it never reached the status of a classic. The design of the grille is somewhat similar to that of the Minerva.





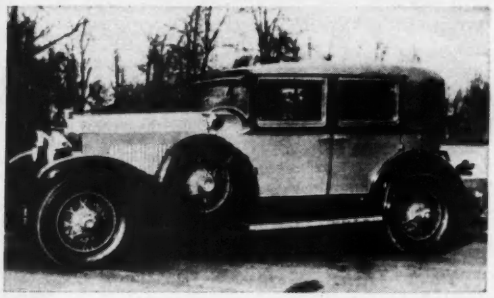
The best 1931 Chevrolet (left) cost a fraction of the price of a Duesenberg or Mercedes. Although it was very dependable, it was a car that cannot be called a classic in true sense.

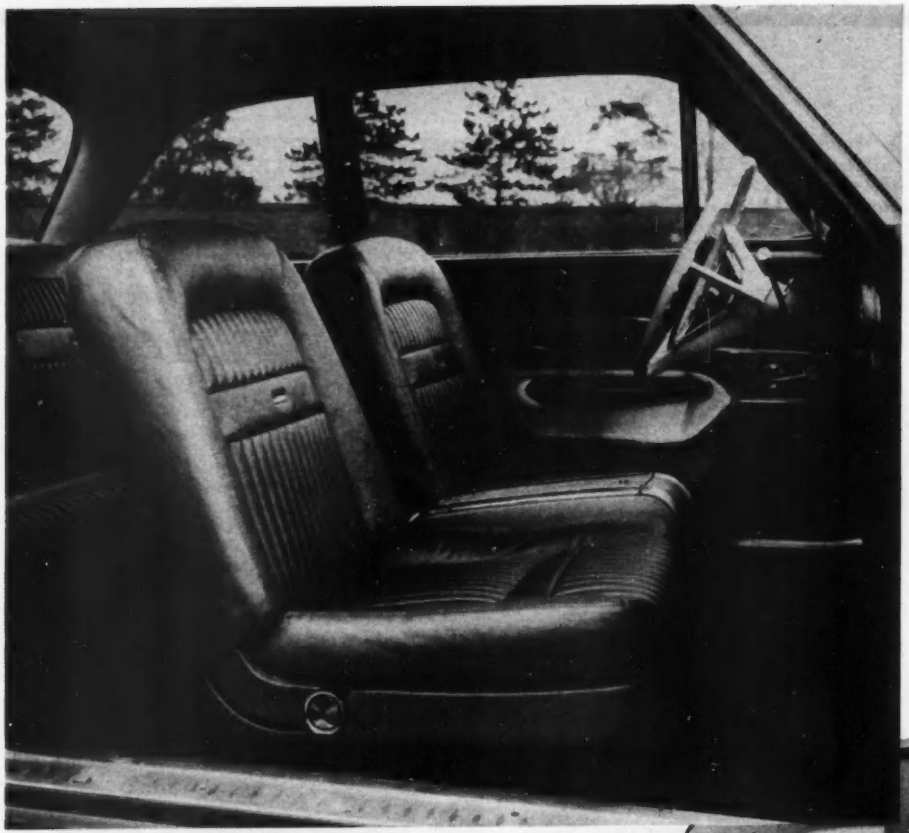




The Moon (right) was a handsome car with sidemounts, body moldings and sun visor, but the illusion of a long hood was damaged by the short wheelbase. The car just doesn't have the features that are found in a classic.

A true classic should never be modified. The Packard above has been modified. Can you spot the changes? The Marmon 16 (left) was one of the most revered cars of all time. A well tuned version would out-perform most any other car in the field.





Rolled and pleated individual front seats add vinyl luxury to the Futura's interior. Color-keyed carpeting also adds to the mood.

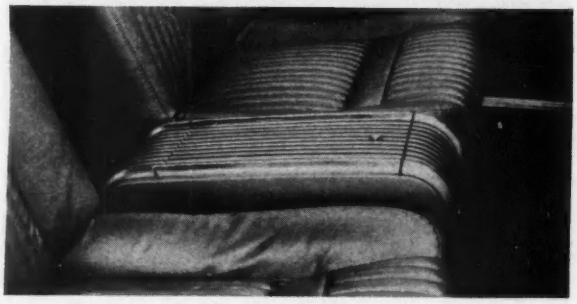
The Falcon Futura

Another compact bids for prestige with a glorified interior

TWO OF THE MOST SUCCESSFUL new cars in recent years have come from the Ford stable. The Falcon and Thunderbird have entered the distinct fields of economy and luxury transportation and cut out for themselves good shares of the market, along with devoted bands of drivers. Now their parent company has announced a modified version of the Falcon, which attempts to combine some of the better-received features of both of these popular cars.

The Falcon Futura varies little in outside appearance from the standard compact sedan that is now in its second year in Ford dealers' showrooms. Inside, however, is a luxurious passenger compartment which has all of the flair of the big T-Bird.

Two individually adjustable bucket seats welcome the front passengers. Foam padded and vinyl covered, they offer a deep and comfortable position and have a contoured roll



Center console gives the Thunderbird touch to the deluxe Ford compact. Lid can be lifted for access to a handy secondary storage area.

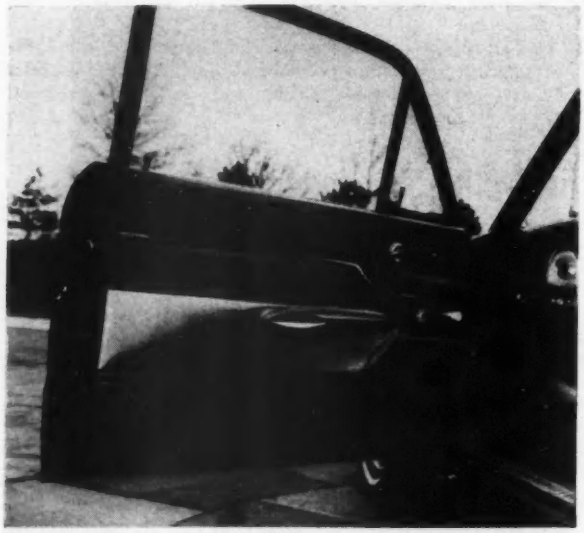
External indications of the plush Futura are the teardrop-shaped ornamentations on the rear quarter panel, special wheel covers and tires.

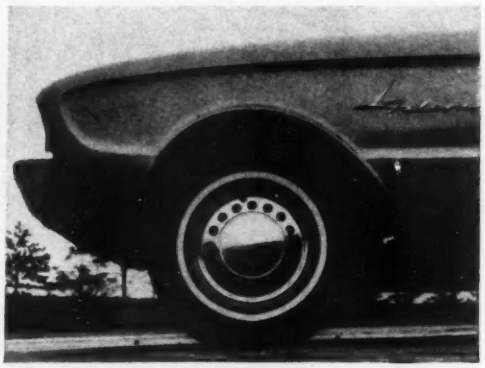
on their edges and backs which keeps the rider firmly in place. The back seat is of a bench design, but padding and pleating are such that there is a semi-bucket effect for two passengers. An embossed Falcon emblem is in place between these two seat positions.

A very important feature of the front seats is the manner in which the back of the right seat folds down to allow entry to the rear. As on the Thunderbird, this back is designed to fold all the way down to the front cushion. It's a great help for those climbing in and, combined with the rather wide doors of the Falcon shell, it makes the Futura the two-door compact with the easiest back-seat accessibility.

To add further differentiation from other deluxe compacts and to make the resemblance with the Thunderbird stronger, the Futura has been equipped with a console between the two front seats. This metal-topped unit is too low to be an armrest but it does have some practicality. The hinged top covers a small but useful secondary glove compartment.

The floor area is completely carpeted

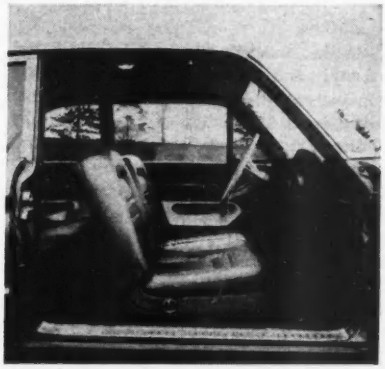




Polka-dot wheel covers are exclusive with the Futura. New scuff-proof whitewall tires are available only on this car, but as an option.

Standard equipment on Futura are new-style door panels of washable vinyl with bright inserts. Armrests at all four passenger positions are included without extra cost.

Although rear seat of the two-door sedan is of bench-type design, upholstery is such that a semi-bucket effect is obtained for two passengers. Falcon crest is on the back.



Another important feature borrowed from T-Bird is full-folding seat back which, with wide-opening doors, gives Futura easiest back seat access.

and this covering, along with the vinyl upholstery, is offered in five color combinations: black, metallic blue, metallic brown, red and metallic turquoise. Standard equipment in the Futura includes a white steering wheel and color-keyed steering column and instrument panel. The door panels have been specially restyled and trimmed for this version, and armrests are standard in all four passenger positions.

The Futura can be recognized in traffic by its distinctive polka-dot wheel covers and the three teardrop-shaped ornaments on the rear fenders. Narrow-band whitewall tires are optional on the Futura; they are not offered on any other Falcons. Chrome trim outlines the window areas, but the contoured side panels are not outlined by the bright metal band that marks the deluxe '61 Falcons.

Dimensions of the new version are identical to those of other Falcons. Overall length is 181.2 inches, width is 70.3 inches and height is 54.5 inches. Wheelbase is 109.5 inches.

A choice of engines is offered to the new Futura owner. Standard is the 144-cubic-inch ohv six-cylinder powerplant, while the larger 170-cubic-inch Special engine is an option. As expected, there is also a decision to be made between the three-speed manual or the two-speed Ford automatic transmissions. /MT

NEW NHRA STOCK CLASSES

SPECTACULAR COMPETITION is expected in the stock classes at this season's drag races. Higher-powered cars than ever are hitting the quarter-mile strips as Chevrolet, Ford, Plymouth and Dodge challenge Pontiac's dominance of the sport. Last year, 360 hp was just about tops among makes seriously competing for major stock honors, but that same figure marks the *lowest* rating among the new contenders.

The National Hot Rod Association, drag racing's most important sanctioning body, has recognized this development by re-aligning its stock classes and establishing new policies for certain modifications and special equipment.

For closer matches, the hotter machines are now grouped much more evenly. Under the new rules, cars that raced in Super and A/Stock at 1960 meets are broken into six separate classes, while the total number of stock categories has been increased from seven to 12.

Weight-to-power ratio, based on shipping weight divided by advertised horsepower, still serves as the standard of classification. Super Stock, or S/S, previously meant any production automobile with 12.59 lbs./hp or less. For 1961, it has been cut to 10.59 lbs./hp. Other new classes are as follows: A/S, 10.60 to 11.29 lbs./hp; B/S, 11.30 to 11.88 lbs./hp; C/S, 11.89 to 12.49 lbs./hp; D/S, 12.50 to 13.99 lbs./hp; E/S, 14.00 to 14.99 lbs./hp; F/S, 15.00 to 15.59 lbs./hp; G/S, 15.60 to 16.99 lbs./hp; H/S, 17.00 to 18.99 lbs./hp; I/S, 19.00 to 21.49 lbs./hp; J/S, 21.50 to 25.49 lbs./hp; and K/S, 25.50 lbs./hp and above.

Obviously, some former S/S champions have been demoted. The '57 Chevy, for example, with its lightest two-door body and 283-hp fuel-injected engine, has 11.27 lbs./hp, dropping it into the new A/S group by a slim margin. Heavier bodywork would make it a B/S, but at least it will be competing with cars of similar ability. Against this year's top performers, it would have no luck at all; its equivalent in a new Chevy has 360 hp for a mere 9.86 lbs./hp!

Another significant aspect of the new rules is the narrow margin within each class. A/S used to cover a range of 2.39 lbs./hp, but now it is only .69 lbs./hp. Variations in body style or transmission can affect the weight enough to place different cars of the same make and power in separate classes.

The 305-hp Chevy, hottest engine available from its maker with either manual or automatic gearing, provides a good case in point. With a stick shift in the lightest Biscayne sedan, it rates as a B/S. Drop the same power train into the heavier Impala convertible, and it becomes a C/S. Then substitute the heavy-duty Powerglide transmission, and weight is increased sufficiently to push it down to D/S!

The whole point, of course, is to pit cars against each other as fairly and evenly as possible. Much more interesting matches should result.

Other changes in the NHRA rules allow more leeway in modifications and equipment with, again, the aim of equalizing competition.

Floor levers for manual transmissions are allowed on all makes, for example, regardless of their availability as factory options. This will reduce the quick-shift advantage of four-speed Chevrolets and Pontiacs. Conversions can be either a cross-breed of stock parts, such as a Chrysler 300-G linkage in a Plymouth, or any of the approved kits now offered by most speed shops.

Three items, ignition, exhaust and rear axle ratio, no longer have to conform to factory specifications. The ignition can be any battery-operated system; previously, only minor internal changes were allowed. Lakes pipes are now permitted, confirming a policy already followed by many individual strip operators. Finally, any axle ratio can be used, provided the gears fit into the original housing.

A booklet containing the complete NHRA drag rules for 1961 is available for 50 cents from the National Hot Rod Association, 1171 North Vermont Avenue, Los Angeles 29, California. /MT

SPEED AND LUXURY are superbly combined in the Chrysler 300-G, seventh in a series of magnificent road cars. Offering one of the hottest standard engines in production, the 300-G is geared and sprung for rapid highway travel and features a richly tailored interior for comfort over long distances.

With 375 hp, a three-speed manual gearbox and 3.23 rear axle, MOTOR TREND's 300-G scored a 0-60 time of 8.3 seconds, impressive but only a hint of the true potential. The car comes into its own on the highway, not at the drag strip.

Quick bursts of power, such as for passing, are right on tap in third gear. At 60 mph, for example, a terrific punch is available without a downshift. And dropping into second, a ratio stretching beyond 90 mph, provides even stronger response. Top speed is estimated to be nearly 130 mph, well beyond any safe or legal limits.

Naturally, this sort of performance takes fuel. The test car averaged between nine and 13 mpg, one of the lowest figures so far recorded for a '61 model. Conservative highway driving might yield slightly better mileage but would be ignoring the whole purpose of the car.

Away from high-speed conditions, road behavior did not prove as satisfactory. Acceleration, though brisk, was actually slower than that recorded for last year's 300-F with a similar 375-hp engine coupled to an automatic transmission, and driving in heavy traffic with the stick shift was extremely awkward.

Fundamentally, the engineering is repeated from the 300-F with one important exception, the manual gearbox. Based on the 413-cubic-inch Chrysler V-8 also used in the New Yorker and Imperial, the 300-G engine has a 10.1-to-1 compression ratio, two four-barrel carburetors and a ram intake manifold. The stock 375-hp unit peaks at 5,000 rpm and produces 495 lbs.-ft. of torque at 2800 rpm. Automatic Torqueflite is the transmission specified by the factory, while the new manual is available at extra cost.

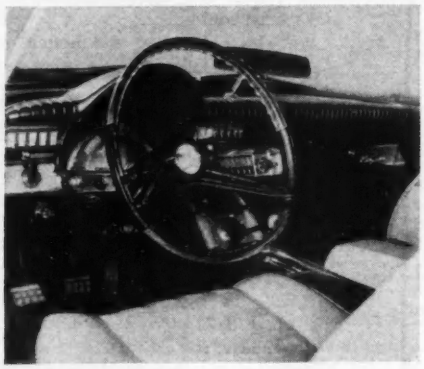
The 300-G can also be equipped with a faster-revving engine of even greater horsepower, 400 at 5200 rpm. Torque is reduced slightly, though, to 465 lbs.-ft. at 3600 rpm. The stick shift is mandatory with this powerhouse, replacing an imported four-speed box used in the 400-hp 300-F.

Similar to the heavy-duty, three-speed manuals offered in lower-priced Chrysler products, the new transmission has a 2.55 first gear and 1.49 second. While smooth and precise to operate, it showed no performance advantage over the automatic.

The 0-30 time of 3.5 seconds and 0-45 of 5.4, both lower than expected, must be blamed on the wheelspin necessary to get the fastest possible start. Another factor, a long throw of the lever between first and second gears, worked against the 8.3-second 0-60 figure. The arm movement required was too much for a really fast upshift.

Torqueflite has only a 2.45 first and 1.45 second but gets additional reduction, as high as 2.2, from its torque converter. This means its maximum potential ratio at takeoff is 5.39, so the car can break from the line at higher engine speed with less wheelspin. The automatic also shifts faster than most drivers can manage with the stick, cutting even more

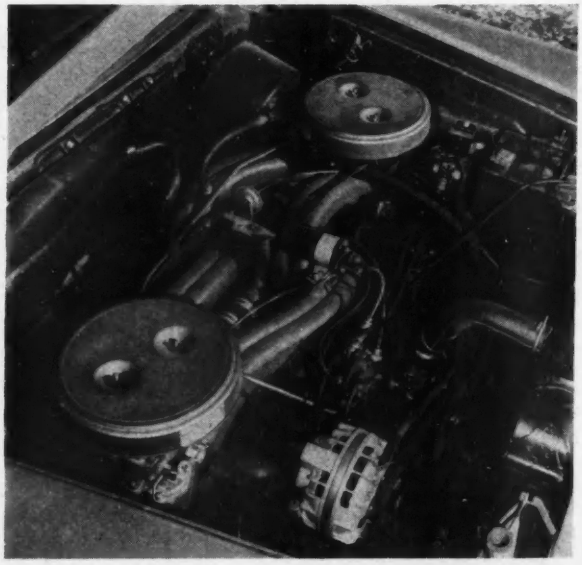
ROAD TEST



Chrysler 300-G

A REAL SPECIALIST IN HIGH SPEED CRUISING

Throne-like seats, separated by armrest-cum-glove box, are used front and rear. Small square patches are ventilated to reduce the stickiness from perspiration.



Chrysler's "magic ingredient," ram induction, virtually hides the 413-cubic-inch engine from view. Normal output is 375 hp at 5000 rpm; optional is 400 at 5200!

time from the acceleration figures under equivalent conditions.

For everyday use, the manual displayed further faults. The ram V-8 may peak at a relatively low rpm but it can still be temperamental at really slow speeds. Revs should be kept in an efficient range, not easy to do with the ratios at hand. Worst of all, first gear, which should be used much more liberally than in an ordinary car, is not synchromesh.

Again, Torqueflite solves most of the difficulty. The converter absorbs much of the 375-hp engine's uneasiness and, of course, the automatic box shifts into first whenever a lower ratio is needed.

In short, the manually geared 300-G is simply not as flexible as the automatic version. But, regardless of transmission, the car was engineered for the open road, not city streets.

That same principle applies to the suspension. While it follows established Chrysler practice of front torsion bars and rear semi-elliptics, it has been specially engineered for highway stability. Spring rates are 40 per cent stiffer than normal and both the stabilizer bar and shock absorbers are set up for heavy duty.

On fast straightaways, the test car was absolutely steady with no bounce and no float, just a firm "glued to the road" feel. At lower speeds, however, the ride was quite hard and vibration on rough surfaces could be severe. Even when cruising on smooth roads, there was enough shock to flutter the hood.

Cornering ability, too, was impressive, though the firmness of the springing was deceptive, suggesting a degree of handling not really there. Body sway was slight and directional control good, but the car's sheer bulk prevented it from handling really nimbly. On broad, sweeping turns, for example, the rear end broke a little too easily. It was possible to correct quickly and accurately with the standard Chrysler power steering, at least once its light touch had been mastered.

Larger wheels are used this year, along with ventilated covers, for better brake cooling. The brakes themselves, however, are standard New Yorker and not up to the 300-G's potential speed. They fade more rapidly than desirable in such a powerful car.

Because the car is meant to cover long stretches of open road, careful attention has been given to passenger comfort. The 300-G has the same two-door hardtop and convertible bodies as the New Yorker but with an entirely different interior layout.

The seats are four huge buckets, upholstered in ventilated leather. The front pair retains the swivel feature abandoned in other Chrysler products for '61. Actually, it is of some use with individual seats but proved impractical with a normal bench.

With good contouring and a six-way power adjustment, drivers of all sizes and shapes can find comfortable positions. Surprisingly, the passenger's side cannot be regulated separately; it moves right along with the driver's.

A tunnel console divides the compartment down the middle. Front and rear, it incorporates the power window controls, ash trays and armrests that conceal small package compartments. The last proved ideal for maps, cigarettes, glasses and other items that are hard to keep handy without being in the way. /MT

The fantastic performance of the 300-G should really be experienced to be appreciated. Tremendous power is matched by superior suspension for control at high speed.

MOTOR TREND TEST DATA

TEST CAR:	Chrysler 300-G
BODY TYPE:	Two-door hardtop
BASE PRICE:	$5411
ENGINE TYPE:	Ohv V-8
DISPLACEMENT:	413 cubic inches
COMPRESSION RATIO:	10.1-to-1
CARBURETION:	Two four-barrel (ram)
HORSEPOWER:	375 @ 5,000 rpm
TRANSMISSION:	Three-speed manual
REAR AXLE RATIO:	3.23
GAS MILEAGE:	9 to 13 miles per gallon
ACCELERATION:	0-30 mph in 3.5 seconds, 0-45 mph in 5.4 seconds and 0-60 mph in 8.3 seconds
SPEEDOMETER ERROR:	Indicated 30, 45 and 60 mph are actual 32, 47.5 and 63 mph, respectively
ODOMETER ERROR:	Indicated 100 miles is actual 97 miles
WEIGHT-POWER RATIO:	10.65 lbs. per horsepower
HORSEPOWER PER CUBIC INCH:	.91

STUDEBAKER HAWK

ROAD TEST

FUN AND PRACTICALITY IN ONE FAMILIAR PACKAGE

FOR DRIVING PLEASURE with family utility, the Studebaker Hawk is a top choice in its price class. It has good measures of performance and roadability, yet is a comfortable, practical car for everyday use. Further sporting flavor has been added this year with bucket seats and, as an option, a four-speed floor shift.

In basic design, the Hawk V-8 has changed little since it first appeared as the '53 Studebaker Commander coupe. Steady refinement, however, has forged it into a superior highway machine.

The '61 Hawk tested by MOTOR TREND combined a 210-hp engine, the new four-speed gearbox and a 3.31 rear axle to reach 0-30 in 4.5 seconds, 0-45 in 7.0 and 0-60 in 10.6 — above-average figures for a standard V-8 in the lower-priced field. Compared with an automatic transmission, the new stick shows its biggest performance advantage at higher speeds, where a downshift from fourth to third provides a solid jolt for passing.

Because of short valve timing, the powerplant is extremely flexible. It will push the car beyond 50 mph in first gear, yet accelerate smoothly from below 15 mph in fourth. It is an engine that reacts briskly to frequent shifting but does not demand it. In other words, the Hawk tolerates a variety of driving moods, the type of characteristic that gives it its appealing personality.

Fuel consumption was in the 13-to-17-mpg range, with an occasional stretch between 18 and 20 mpg at moderate highway speeds.

The 289-cubic-inch Hawk engine is the same as the current Lark V-8 but with a longer stroke. It has an 8.8-to-1 compression ratio to allow the use of regular fuel, a dual exhaust system and, with normal two-barrel carburetion, develops 210 hp at 4500 rpm and 300 lbs.-ft. of torque at 2800. An optional four-barrel intake advances these figures to 225 hp at 4500 and 305 lbs.-ft. at 3,000.

In addition to the new four-speed transmission, choices include a conventional three-speed with or without overdrive and an automatic three-speed supplied by Borg-Warner. Axle ratios of 3.07 and 3.54 can be ordered in place of the 3.31.

The four-speed gearbox is similar to that used in the Corvette and even has the same ratios, 2.20 in first, 1.66 in second and 1.31 in third, closely spaced for road work in contrast to the somewhat wider spread for drag racing used in the big Chevrolet and Pontiac four-speed units. As fitted to the Hawk this transmission is well within the outputs for which it was designed and should give extremely reliable service.

The Hawk's performance is complemented by very good suspension, one of those rare systems that provide control without sacrificing comfort. Cornering becomes a problem only when a turn is extremely tight. Then, the 120.5-inch wheelbase can be slightly awkward to handle, and a slight nose heaviness causes the front end to plow. Generally, though, the car rates high marks for its stability. A capable driver can get a Hawk down a winding road much faster than he could several makes with much more horsepower.

The steering is adequate, if somewhat slow at 4.6 turns lock-to-lock. Unfortunately, it does not have the refinements incorporated in the '61 Lark for quicker recovery and better feel of the road.

From a comfort standpoint, the relatively long wheelbase is an advantage. There is little fore-and-aft pitching on even the roughest surfaces. Overall riding qualities are firmer than normal but rarely harsh.

Highlighting the interior this year is a pair of bucket seats in front. Carefully contoured, they are padded with foam rubber and finished in vinyl and cloth or, optionally, completely in vinyl. Reclining backs are available and recommended; the normal angle is too erect for some tastes.

Despite the close-coupled layout, the rear compartment offers a fair amount of room for two adults or three children. Skillful modifications have improved it considerably since the first '53 coupe.

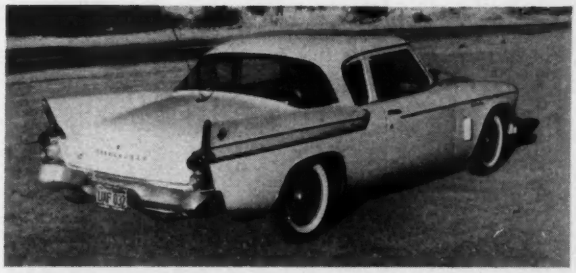
The cockpit is comfortable and functional with only a few minor flaws. The steering wheel, slightly oval-shaped, is well placed and the floor gear lever is right at hand without being in the way of anybody's legs. If the car is parked with reverse engaged, however, the lever collides with the emergency brake handle, located along the right side of the steering column.

A more serious problem involves the foot controls. Because of the transmission hump, the pedals are offset to the left, placing the brake left of the steering column. As a result, the driver is apt to trip his toe on the column as he moves from throttle to brake. He soons learns to swing his foot around it, of course, but until he does, he can lose a precious second or two during a panic stop.

The offset pedals, which are not suspended but protrude through the floor, also force the driver to sit at a slight angle, though it is not at all uncomfortable.

The dash is one of the best to be found on a current U.S. car and features a complete set of instruments. Honest, round dials indicate not only speed and fuel level but also replace the silly lights so often used to show temperature, oil pressure and generator charge. Appropriately enough with a four-speed manual shift, a tachometer is available as an extra, placed where it belongs, right in front of the driver. Such completely functional instrumentation is the ideal finishing touch on a car meant for people who really like to drive. And that the Hawk is.

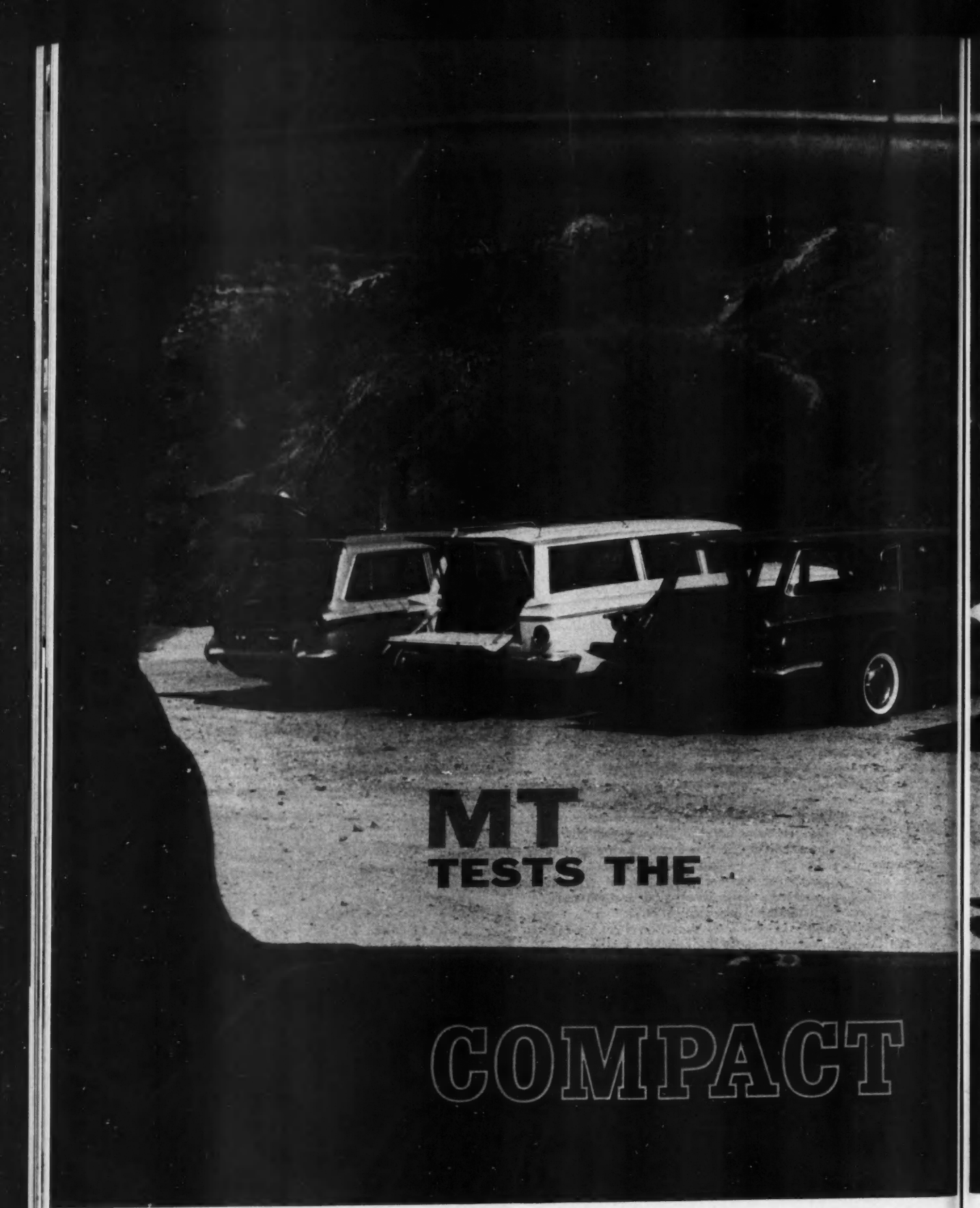
/MT



MOTOR TREND TEST DATA

TEST CAR:	Studebaker Hawk
BODY TYPE:	Club coupe
BASE PRICE:	$2650
ENGINE TYPE:	Ohv V-8
DISPLACEMENT:	289 cubic inches
COMPRESSION RATIO:	8.8-to-1
CARBURETION:	Single two-barrel
HORSEPOWER:	210 @ 4500 rpm
TRANSMISSION:	Four-speed manual
REAR AXLE RATIO:	3.31
GAS MILEAGE:	13 to 17 miles per gallon
ACCELERATION:	0-30 mph in 4.5 seconds, 0-45 mph in 7.0 seconds and 0-60 mph in 10.6 seconds
SPEEDOMETER ERROR:	Indicated 30, 45 and 60 mph are actual 30, 44.5 and 59 mph, respectively
ODOMETER ERROR:	Indicated 100 miles is actual 97 miles
WEIGHT-POWER RATIO:	15.27 lbs. per horsepower
HORSEPOWER PER CUBIC INCH:	.727

Bucket seats and four-speed gearbox add to the Hawk's appeal. Functional dash arrangement has complete set of instruments, including tachometer as optional.



MT TESTS THE COMPACT

WAGONS

A complete report on 10 "small" cars designed to perform big jobs

LONG BEFORE COMPACT CARS were anything but ideas tucked away in the heads of a few Detroit engineers, station wagons had already started a quiet but revolutionary change in American car-buying habits. A few years ago station wagons accounted for merely one out of every 10 cars that Detroit built — today the number is nearer one station wagon for each four cars. And this revolution shows no sign of letting up, in fact, it is increasing. In a few years every other car from Detroit may well be a station wagon!

It is not surprising then, that when compact lines began multiplying this year, compact station wagons were not far behind. Before the 1961 model season was a month old, every compact had announced its station wagon.

No other single class of cars can offer wider selection than do compact wagons. Any individual who wants a wagon can find a compact that will almost exactly fill his particular need. In fact, some compact wagons are more practical than standard Six wagons — and for practical purposes some will haul as much cargo.

But the best reason for the inevitable popularity of compact station wagons is one of cost. Most compact wagons can be purchased with several accessories for less than the price of a stripped-down standard-sized sedan. There is also more economy in daily use and year-around maintenance. And if present trends hold true, the compact wagon will depreciate far less in dollars, and probably in percentage of cost also, than any other type of car.

CORVAIR

MANY PERSONS seem to confuse the Lakewood with another Corvair body style, the miniature bus, Greenbrier. Corvair's Lakewood is a true station wagon, although it is certainly the most unconventional station wagon currently made in this country.

The Lakewood is offered in only one body style, a four-door wagon. Its powerplant is the well-known horizontally-opposed six-cylinder engine originally developed for the Corvair sedan. A complete list of the options can be found in the specifications chart elsewhere in this issue. Although the axle listed as standard for any power team is a 3.27-to-1, the wagon driven for this test proved that the 3.55 optional ratio is a wise selection for all-around purposes in the wagon series. This axle might mean that the highest mpg figure would be in the low 20's, but the extra power that the lower gearing produces will be extremely helpful when even a moderate load is being carried.

Along with its unconventional rear-engine placement, the Lakewood has a few unique disadvantages that make some types of loading impractical. And, on the other side of the ledger, it has distinct and exceptionally utilitarian qualities that are found on no other American-made wagon.

Since the engine is located directly underneath the cargo floor, a lot of heat tends to be transferred to the cargo compartment. Of course, this actually works out for the best in cold winter months, when the entire passenger compartment can be warmed quickly and efficiently. But in summer the same peculiarity becomes the root of a lot of trouble. Frozen foods, some other foods (butter, for instance), photographic film, etc., might be damaged if stored on the rear cargo floor for any length of time.

This might seem to be a serious limitation on the Lakewood's practicality, but the Corvair station wagon has a compensating front storage area under the hood which outweighs any disadvantage in the rear. This one point is probably the most popular single feature of the compact and has a few subtle advantages that might be overlooked.

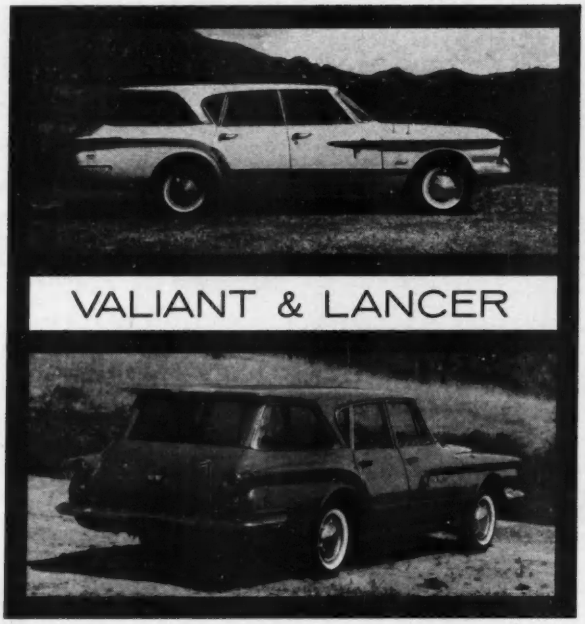
The most elusive quality of the front compartment is that when carrying a heavy load, the weight can be divided between the front and rear, maintaining the most ideal weight balance. This helps tire wear, handling and several other driving traits. Another important feature is that the compartment locks with a key and is entirely separate from the rest of the car. Valuables can be protected without locking up the rest of the wagon.

The biggest drawback to loading the front, however, is that the spare tire is stowed here, as it was on last year's sedan. Although the front is listed by Chevrolet as 10 cubic feet, it takes a lot of shuffling around of the load to get anywhere near that amount of ordinary luggage loaded.

The rear cargo compartment is short from door to second seat back and is uncommonly high from the ground. This makes loading more difficult if the cargo must be lifted from the ground. This cargo compartment can be improved somewhat by folding the second seat back forward as on the sedan. A flat board drops into place between the seat back and the rear cargo area and tightly locks the second seat down. This secondary cargo area is not level with the back. To gain more space, the second seat (literally a floor for cargo purposes) is about eight inches lower. This makes more total space and some higher items can be hauled that couldn't be before.

The tailgate is a counterbalanced lift type and opens wide enough so that large parcels can be carried. It does not lock up, and in the event that long items which extend out the back are carried, it must be tied down. The rear window is fixed and will not roll down, a disadvantage in hot weather.

Access to the engine is good as far as normal maintenance operations, such as checking the oil, etc., are concerned. If extensive repairs are needed on a trip, such as changing the vee-belt, the entire load must be removed from the rear cargo area to lift the floor. /MT



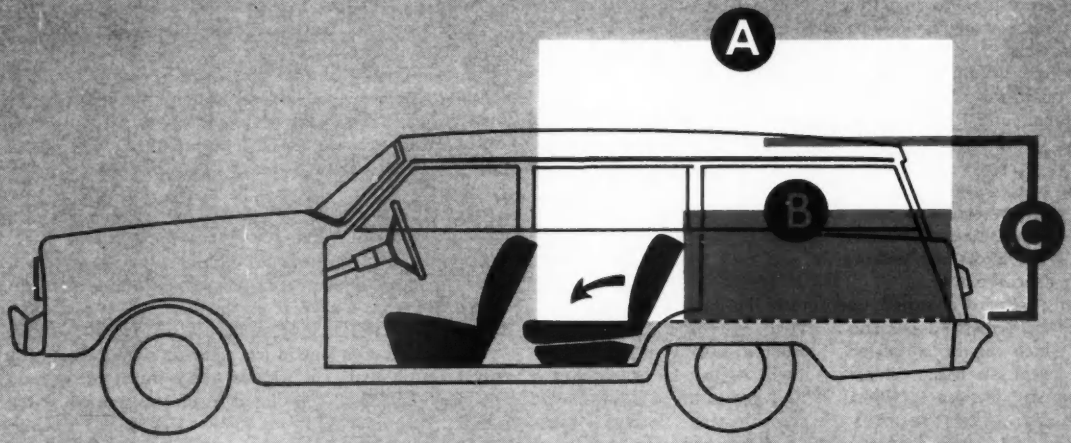
VALIANT & LANCER

ALTHOUGH THERE ARE many external styling differences, the engineering features throughout Dodge's Lancer and Plymouth's Valiant are shared in all their models. The same is true of the station wagon series, and the similarities extend to overall design of the cargo compartment.

Both lines are powered by the 170-cubic-inch Slant Six, and both offer as an optional engine the 225-cubic-inch version. The bigger engine, rated at 140 hp, is even more significant to the station wagon, where power becomes more important as the weight of the cargo increases. Moreover, two separate four-barrel carburetor options are available for the 225, which increase the power to nearly 200 hp. All of these engine options have been tested by MOTOR TREND and a reasonably accurate assessment can be made. With the 225, performance is going to be above average for the compact class, and with the four-barrel option it will equal many standard-sized wagons. The smaller engine will fall into the average economy bracket for the compact class, while the bigger engines with power options will drop considerably in mpg figures.

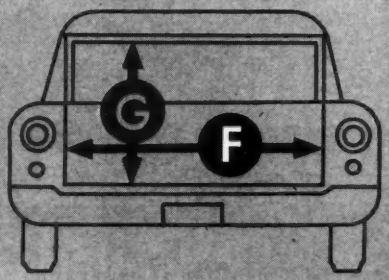
The station wagon series has one engineering change, and it is quite important. In the rear suspension there is an additional leaf spring. This stiffens the ride some but also gives the

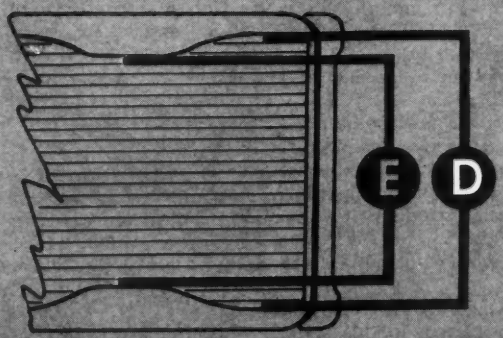
continued on page 60



		American	Corvair	Falcon	Comet	Buick Special	Olds F-85	Tempest	Lancer	Valiant	Lark
MAXIMUM LENGTH	A	73.7	77.2	85.9	85.9	83.4	84.0	83.4	82.6	82.6	72.0
MINIMUM LENGTH	B	43.3	47.2	53.3	53.3	53.1	53.1	53.1	51.0	51.0	46.5
MAXIMUM HEIGHT	C	30.5	26.7	33.1	33.1	30.8	31.1	30.8	31.3	31.3	35.0
MAXIMUM WIDTH	D	59.4	56.9	57.2	57.2	56.7	56.7	56.7	52.6	52.6	58.0
MINIMUM WIDTH	E	40.6	38.9	42.1	42.1	44.1	44.1	44.1	43.6	43.6	42.0
REAR OPENING WIDTH	F	40.4	49.7	45.5	45.5	52.4	52.4	52.4	41.0	41.0	45.0
REAR OPENING HEIGHT	G	25.9	25.6	27.0	27.0	29.3	29.3	29.3	27.4	27.4	25.6
CARGO VOLUME		57.3	58.0	80.0	80.0	73.8	73.3	73.1	67.1	67.1	NA

(All figures are for two-door models)





	2-DOOR	4-DOOR
BUICK SPECIAL		$2681
CORVAIR		2266
COMET	$2310	2353
DODGE LANCER		2354
FORD FALCON	2225	2268
OLDSMOBILE F-85		2681
PLYMOUTH VALIANT		2327
PONTIAC TEMPEST		2438
RAMBLER AMERICAN	2080	2129
LARK SIX	2290	2370

Prices are factory list price plus federal excise tax amounts and suggested dealer delivery and handling charges.

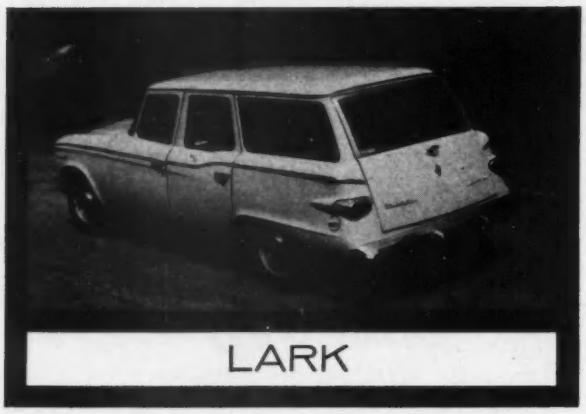
wagon greater potential in carrying heavy loads. Both Lancer and Valiant score high for handling, and with the stiffer springing the station wagons rank with the best handling cars in the compact class.

The Lancer-Valiant cargo compartment is about average for the compact wagons. None of the individual measurements are exceptional, and a few are less generous than most compact wagons. However, the cargo area is well laid out and for practical purposes the same amount of cargo can be carried that can be loaded into any other compact.

To convert the cargo compartment into maximum loading area, the second seat folds over its bench. A folding piece of metal drops into place, locking the seat back here and making a fairly flat cargo floor.

The spare tire is stored underneath the cargo floor and is covered by a metal door. This area has space for a few small items which can be concealed, but not locked from outsiders in the event the back window is down. A little-known option for the Valiant is a third seat. This consists of two cushions and a split lid for the spare tire compartment. The lid folds into a seat back and bench and the cushions become the actual third seat. In the event that the third seat option is installed on a car, captive-air tires replace the regular ones, and the spare is done away with entirely. Strangely enough, this option was announced for Lancer at the start of the model year, although it is not presently available through dealers.

The rear opening is a drop leaf with a sliding window operated electrically. Items too long for the bed can be hauled with the gate down, which adds about two feet to the cargo floor, or since the window rolls down completely, they can be extended out the window and supported on the tailgate. /MT



LARK

STUDEBAKER LARK station wagon is available with a wide choice of power teams. There are several axle ratios and two engines, a Six and a V-8. On the basis of MOTOR TREND's earlier tests of all the available engines, the V-8 seems to be the wisest choice for the station wagon. Performance is considerably improved, and the mpg figure is almost the equal of the Six.

There are few engineering changes made especially for the station wagon, but one of these, an extra leaf in the rear springs, makes a marked improvement in handling. The ride of the wagon driven for this report was firmer, but cornering and overall stability are better at all speeds. Of course, the extra leaf means that heavier loads can be carried with less chance of damage to the suspension — a big advantage in a station wagon.

The Lark's cargo compartment is the best of the compacts in two respects: it is the widest, 58 inches, and the highest, 35 inches. And although its minimum length (taken with the second seat up) is not too impressive when compared mathematically, the Lark wagon has ample room for four passengers and the normal luggage they would need on an ordinary weekend trip. But most important, due to the extra width and height, it is easier to load regular suitcases or parcels without juggling them around.

One peculiarity of the Lark station wagon makes carrying some long items a little difficult. The second seat bench tumbles forward, but instead of rolling all the way over, it stands vertically and the seat back butts up flush with it, making a T-shaped extension of the cargo floor. This, in effect, shortens the cargo floor by about eight inches. Of course, some items can be toted by laying them on top of the seat bench and angling them to the floor. One advantage of the Lark wagon, when longer cargo is to be moved, is the optional front reclining seat. This can be dropped back a few notches, permitting cargo nearly two feet longer than the bed to be carried with the tailgate closed.

The Lark station wagon has a lift-up window and a drop-leaf tailgate in the rear. The window has a sturdy metal frame and a good lock that securely holds it in up position while the wagon is in motion. /MT

RAMBLER AMERICAN

AT 100 INCHES WHEELBASE and 173 inches overall length, the Rambler American station wagon is the smallest compact wagon made in this country. Despite the limitations of measurements, the American's designers have come up with an overall station wagon design that scores high in practicality and utility purposes if not in total volume of cargo capacity.

The American has two engines, both Sixes and both tested extensively by MOTOR TREND in sedans and again in the American wagon driven for this report. For all practical purposes, the new 125-hp ohv Six seems to be the better choice for the station wagon. With this powerplant the performance is improved considerably, and fuel economy is relatively equivalent. Americans have been consistently among the top contenders for economy records, and the station wagon is just a shade under the sedan in mpg.

The cargo volume index shown in the table with this article is a little misleading as to the actual amount of cargo the American can carry. In the regular cargo compartment there is room enough for ordinary purposes and space enough to store luggage for an average weekend trip with the family. The smallness of the wagon makes it ideal for marketing, errands and light deliveries.

To offset the small cargo compartment, the American has, as standard equipment and at no extra cost, a roof-top luggage carrier with tie-downs. This area will more than double the American's cargo capacity and gives it even better hauling abilities than many wagons without the luggage rack.

To convert to maximum cargo capacity, the American's second seat folds over on the bench. On the wagon driven for this report there was no method provided for tieing the seat back down securely. This tends to create an uneven floor,

continued on page 62

Picking a compact station wagon is largely a matter of choosing carefully a wagon which has the features that serve the individual's purposes best. Long items can be a problem on the BOP line, since the tailgate must be completely up or tied down.

Front seat folding arrangement varies widely on all lines; Falcon-Comet layout, right, is excellent both for locking and making a level cargo floor.

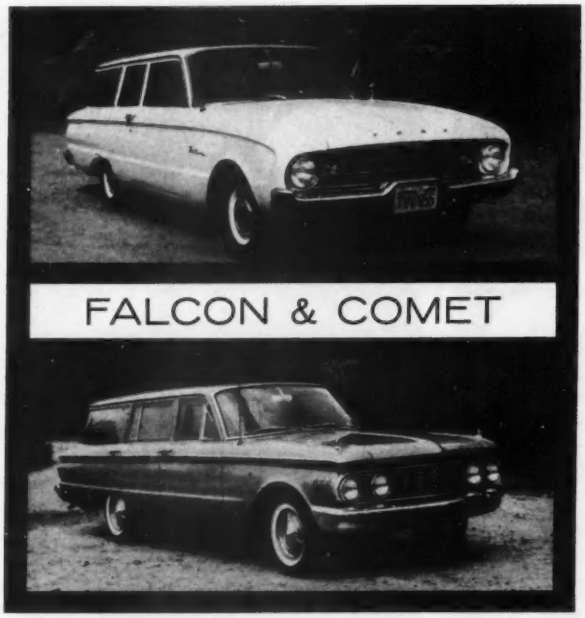
Cargo floors also differ throughout compacts. American's, for instance, does not lock down and is slightly irregular, F-85, extreme right, shows one disadvantage of full-height tailgate in close quarters.

Another important characteristic of all compact wagons is their individual features, like the Falcon-Comet spare tire storage, far left, and the Corvair's front storage compartment.

although it is not a serious problem when loading the wagon to capacity. The cargo floor stops at the forward edge of the second seat bench, and there is about eight inches of gap created by the space for passengers' legs. Although it is possible that some items could be loaded here, it is still inconvenient and some space that could ordinarily be used for cargo is lost.

The cargo floor covering is a fabric mat and snaps down in several places to keep it firmly in place. The floor underneath is painted. This system is an advantage if some material, such as ashes or sand, were to be hauled, since the mat can be removed quickly and later be replaced.

The rear opening is a drop-leaf, swing-up window. The window has a sturdy frame around it for protection, and will lock firmly in its up position for extra ventilation or hauling long items. The position of the window, in relation to the rear-view mirror is poor, however, and severely limits the driver's vision to the back. /MT



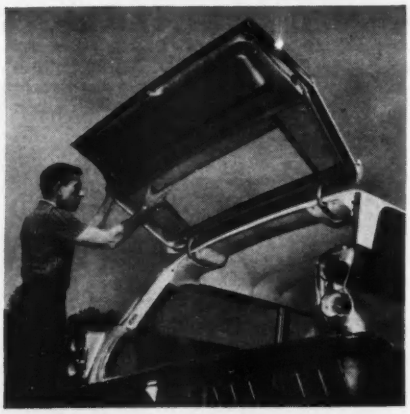
FALCON & COMET

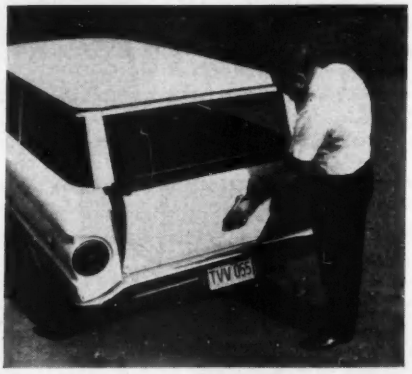
IN THEIR SEDAN VERSIONS, Ford's Falcon and Mercury's Comet have reasonably different personalities. Station wagons, however, are a different breed, and the two lines are quite similar. Power teams, suspension, general layout and nearly all fundamental engineering details are identical or very nearly so. The major differences are exterior sheet metal and a few interior design details.

Both wagons are powered by either a 144-cubic-inch Six or the new 170-cubic-inch modification. The smaller engine has a single-throat carburetor, 8.7-to-1 compression ratio and turns out 85 hp at 4200 rpm. The 170 has identical specs except that it turns out 101 hp at 4400 rpm. Axle ratios are 3.50-to-1 for both engines, with a 4.00 available for the 144-cubic-inch powerplant and no RPO listed for the 170. With any of these power teams neither wagon is going to be an outstanding performer. On the other hand, economy should be a compensating factor, and even with a moderate load the average should be over 20 mpg for normal driving.

The Comet wagon has a shorter wheelbase than its sedan's 114-inch measurement. Both it and the Falcon are identical at 109.5 inches. In overall length the Falcon is about eight inches longer than its sedan, while the Comet is three inches shorter than its sedan.

But outside measurements have little to do with the basic purpose of a station wagon, and the most important question is how good is overall design. In this category both the Falcon





From top: Corvair tailgate swings up with fixed window; BOP, same gate but three window styles; Lark, also American, have tailgate and transom; Falcon, Comet window rolls into tailgate.

and Comet score high; in fact, no other compact wagon can quite equal them for practical or utilitarian purposes. Actually, the cargo compartment and passenger compartment measurements are only slightly above average for the compact class, however, they do show that a lot of horse sense has been used in arriving at an overall design.

The spare tire placement is one of the best solutions found on any domestic wagon, regardless of size. The spare is inside the wagon but not underneath the cargo compartment. It is stored vertically along the right-hand side and directly behind the wheel well. A cover matching the interior hides the tire from view. In this position the spare takes up relatively little cargo capacity and can be removed for emergencies without unloading a lot of cargo. Strangely, neither Falcon nor Comet designers have followed up their advantage with a concealed and lockable compartment beneath the cargo floor. Such an arrangement would be an extra value for the individual who likes to travel with the rear window down in summer months.

The tailgate is a drop-leaf arrangement with a roll-down window locked from the outside (an electric window is optional). The tailgate is braced on either side with heavy bar iron that folds out of the way when the gate is closed.

The cargo compartment is Spartan in its finish, and the floor is covered with a rubber mat. Since the mat is glued down, it never slides around during loading, but is more difficult to replace when it becomes worn.

To convert the cargo compartment to maximum capacity is a simple operation. The bench of the second seat tumbles forward and a metal bar braces it from touching the floor. Then the seat back folds forward into the space between the seat bench and cargo floor.

One distinct advantage in the two-door models is not quite equalled by any other compact wagon. The doors are extra wide, and although they may be a nuisance when parked near another car, if they can be opened all the way, loading is much simpler and easier through the front than on most compact wagons. /MT

BUICK SPECIAL
OLDS F-85
PONTIAC & TEMPEST

IN MANY MINDS Buick's Special, Oldsmobile's F-85 and Pontiac's Tempest have been classified together in a single category called the BOP compacts. Generally speaking, this isn't quite fair, for the three cars' engineering principles are quite different, and each car performs and handles in a manner all its own. But when discussing the overall design of the station wagon series the term BOP fits well. The body shell of the GM compacts is based on the Corvair, and this is the bond that ties the Special, F-85 and Tempest station wagons into a closely knit group. In fact, nearly every inside dimension of the three is identical — those measurements which are not the same are listed separately in the box accompanying this article.

Engine and power train options are too varied to be listed here, but a quick check of the specification table in this issue will show that all have a V-8, and the Tempest several four-cylinder engines. The only important change in the specifications is that the Tempest has a minimum axle ratio for the station wagon series, 3.31 with a manual transmission and 3.55 with an automatic.

The overall design of the BOP cargo compartment is good — one of the best in the compact class. The wagons have a long bed, which extends almost to the front seat back. To convert the floor to maximum capacity, the second seat folds forward and is held in place by a hinged floor plate so there is no gap in the floor. The spare tire is stowed underneath the cargo floor in the rear. This is an extra-roomy compartment, and the tire takes up only a little more than half the area. A lot of gear can be stored here, where it will be out of sight but not protected by a separate lock.

The rear opening has caused a lot of comment, some of it deserved and some not. It is the widest opening of any compact wagon and if it is placed just right, a four-by-eight-foot piece of plywood could be loaded without turning it diagonally. The cargo bed, however, would not accommodate this large a piece of wood and it would have to be supported on the wheel wells. An eight-foot piece of lumber would also extend out the back, and the tailgate would have to be left open.

The BOP tailgate is a single piece, counterbalanced, swing-up design and has an electrically controlled roll-down window. Ordinarily long pieces of lumber, or a ladder, could be carried by letting them extend out through the window. However, the BOP rear window does not roll all the way down into the tailgate. This means if the long item is very heavy, it might break the window.

Loading cargo is relatively easy, since the tailgate swings quite high and at an angle so that even the tallest person can get near the cargo floor. There might be some difficulty for short persons to reach the gate since the gate comes down easily and can be lowered by grasping it near the hinge.

The mid-model-year changes in the Buick and Oldsmobile lines were the introduction of third seat body styles. When the third seat is installed the spare tire is stored vertically alongside the right side. As yet, Pontiac has not announced a third seat option for the Tempest wagon. /MT

HOW MUCH ECONOMY RUN ECONOMY?

BY DON WERNER

Answering the big questions raised by the results of the Mobilgas Economy Run

THE BEST GAS MILEAGE FIGURE of the 1961 Mobilgas Economy Run was the 32.68 mpg set by a Ford Falcon. While it is nice to know that a Falcon can get that many miles out of a gallon of gasoline, such results create as much general skepticism about the validity of the Run itself as they inspire confidence in the Falcon as an economical car.

Unfortunately, the same unrealistic results exist with every other car in all the classes of the Run. A good example is the low-price class for cars of standard size with V-8 engines. This is the group that includes the popular Fords and Chevrolets, etc. The average for the entire class ran better than 20 mpg. Any ordinary driver of one of these cars who claimed that kind of gas mileage would be laughed off the street.

And so on down the list. The medium-price class averaged about 19 mpg. The big heavyweights, the Lincoln, Cadillac and Imperial, in the high-price class finished with close to 17 mpg average.

In view of all this, it is obvious that the Economy Run results are too good to be accepted by the public at large as a guide to the fuel economy capabilities of the cars involved.

Yet the Economy Run does have a very worthwhile purpose. And there is no question about the integrity of the event. Mobilgas, the sponsor, and the United States Auto Club, the supervising organization, draft exceedingly strict rules and apply them relentlessly and ruthlessly. They are determined to make the Economy Run a true and accurate test.

And therein probably lies the key to the dilemma. The Economy Run is not only a test, but even more so, it is a con-test.

In a test of machines, the operators of the machines must regulate their own efforts to arrive at impartial results. In a contest, those who operate or drive the machines are motivated by the desire to win. So then the factors of human skill and clever strategy become important. The Economy Run drivers, therefore, drive in such a manner as to extract the best possible gasoline mileage from their cars. This is natural — but it does contribute heavily to the unrealistic results.

The cars in the Run are absolutely stock, in every sense of the word. The rules are very specific on this point and they are scrupulously applied. The average speeds required are not fast, but fast enough to compare reasonably well with the pace of a cautious driver. In these respects, the management of the Economy Run is most successful and the final mpg averages are kept from truly fantastic levels.

Cases of flagrant cheating by competitors are quite rare. Minor circumventions of the rules are probably common — and may influence positions within classes to some degree – but the total effect on mpg figures is relatively negligible.

There was one known instance in the 1961 Economy Run in which a competitor

1961 Economy Run Results

Compacts — Manual Transmission

32.68	Ford Falcon
31.61	Ford Falcon
30.79	Corvair
28.64	Comet
27.83	Comet
26.67	Lark Deluxe Six
25.46	Oldsmobile F-85
25.32	Oldsmobile F-85
25.23	Tempest Four
24.73	Tempest Four
24.70	Buick Special

Compacts — Automatic Transmission

29.35	Corvair Monza
29.32	Corvair Monza
27.44	Tempest Four
26.34	Ford Falcon
26.19	Ford Falcon
26.13	Valiant
26.06	Comet
25.82	Comet
25.81	Tempest Four
25.08	Valiant
24.80	Dodge Lancer
24.79	Dodge Lancer
23.68	Lark Deluxe

Compact V-8's — Automatic Transmission

25.09	Buick Special
*24.67	Buick Special
24.07	Tempest
23.94	Tempest
23.20	Oldsmobile F-85
23.05	Lark Deluxe
22.63	Oldsmobile F-85

* — Driven by Senior Editor Barney Navarro of Motor Trend

MT Senior Editor Bob Ames checks the detailed markings on one of the long strip maps used by a competitor who obviously had prior information of the Run's route.

apparently obtained prior information on the precise route and thereby was able to chart in advance helpful data on climbing grades and time traffic lights to avoid gas-wasting stops. This information was recorded on long strip maps (see photo), which subsequently came to the attention of MOTOR TREND and a sample was then turned over to USAC officials.

A further factor to consider for the effect it has in the final results is the official time charts provided each competitor by USAC, along with the map of the route for one day (see photo). These charts, made available only a few hours prior to departure, consist of an exceedingly detailed list of driving times from point to point along the route. There is precise timing, in minutes and seconds, of the exact elapsed driving time between major intersections, populated areas and various landmarks.

The idea is to indicate the speeds necessary to maintain in order to arrive at the overnight stop in the time alotted without penalty. It requires the drivers to hold faster and consequently less economical speeds.

Such assistance to the driver obviously is vastly different from the situation of the ordinary motorist who generally also has a fixed destination but lacks this benefit of point-to-point timing. The purpose of the Economy Run would be better served if competitors were provided with common Mobilgas road maps, instructions to drive to a certain destination in a given number of hours via specific highway routes. Simple check points along the way, together with the customary official ob-

continued

Standard Sixes —

Automatic Transmission

23.15	Plymouth Savoy
23.01	Dart Seneca
22.56	Mercury Meteor
22.33	Chevrolet Biscayne
22.26	Mercury Meteor
22.23	Dart Seneca
22.17	Plymouth Savoy
22.09	Ford Fairlane
21.84	Chevrolet Biscayne
21.61	Ford Fairlane

Low-Price V-8's —

Automatic Transmission

21.33	Ford Fairlane
21.21	Plymouth Savoy
21.16	Ford Fairlane
21.07	Chevrolet Bel Air
20.97	Mercury Meteor
20.87*	Chevrolet Bel Air
20.85	Mercury Meteor
20.83	Pontiac Catalina
20.36	Pontiac Catalina
20.31	Dodge Dart
19.85	Plymouth Savoy

Medium Price —

Automatic Transmission

19.99	Chrysler Newport
19.60	Pontiac Star Chief
19.58	Pontiac Star Chief
19.39	Chrysler Windsor
18.80	Buick Le Sabre
18.61	Oldsmobile 88
18.45	Oldsmobile 88
18.43	Mercury Monterey

High Price — Automatic Transmission

18.92	Cadillac
18.73	Imperial
17.23	Lincoln Continental
16.66	Lincoln Continental

servers in the car, would insure no short cuts were taken or other evasions of the rules.

Such a system presumably would also reduce the opportunity for competitors to obtain in advance the run route for study and even practice.

Despite the foregoing variables that influence the results of the Economy Run, it still is possible to interpret those results in such a way as to arrive at reasonably valid conclusions regarding the fuel economy capabilities of the cars.

In the April issue of MOTOR TREND, on the subject of the Mobilgas Economy Run, it was pointed out that the mileage figures of the various classes could be discounted by a simple rule of thumb and realistic figures arrived at that could be accepted as meaningful by the average car buyer.

The discounting of the results varies from class to class. In the case of the more powerful cars with V-8 engines, the difference between the Economy Run results and the discounting, for instance, in the case of the powerful V-8 cars is greater than in the lower-powered compacts. The reason is that the big V-8's have a power reserve generally used by the average driver, which reduces economy. With such cars, however, the easy driving habits of the Run drivers rarely calls this power reserve into action. The compacts, on the other hand, have such inbuilt economy (actually the absence of a high-performance power reserve) that they cannot be abused by heavy-footed driving of ordinary motorists. And the careful driving in the Economy Run does not make the difference as great as the big-engined cars.

In judging the 1961 Economy Run results, therefore, it was recommended in

USAC provided entrants with official time charts and maps of Run (left). Some feel that event would be even fairer without these.

LEFT AT THE STARTING LINE, THE RAMBLER AMERICANS AND THEIR CREWS SHOW SORRY RESULTS OF RULES DISPUTE.

MOTOR TREND, that by deducting a fixed number of miles-per-gallon from the final mpg figures, the public could arrive at averages typical of the kind experienced in normal driving. It was suggested that three mpg be deducted from the economy compact class results, from four to five mpg from the standard-size cars with six-cylinder engines, and about five to seven mpg be subtracted from the big V-8 averages.

This rule still is good. Now that the Run has been completed and the formula is applied, in round figures, we find that the overall average of the compact class-manual transmissions of 27 mpg would be reduced to 24 mpg. The compacts with automatic transmissions drop from the Economy Run average of 25 mpg to 22. And the realistic average for the standard-size cars with six-cylinder engines would be 18 mpg, arrived at by discounting four mpg from the Economy Run class average of 22 mpg.

Extending this same procedure to the big V-8's reduces the low-price class from 20 mpg to 13-15 mpg; the medium class from 19 mpg to 12-14; and the high-price class from 17 to 10-12 mpg.

Based on the extensive experience of MOTOR TREND road testing, those averages in my judgment generally approximate what the ordinary motorist can expect to obtain with cars in those classes.

There are answers to other universal questions regarding fuel economy in the Run results. The answers are not new or revolutionary, but they further reaffirm data reported regularly in MOTOR TREND, particularly in road test reports.

One of these is the difference in mpg between manual and automatic transmissions in cars otherwise identical. The 1961 Run was the first since 1954 in which cars with manual transmissions were permitted to compete. So there is this year an interesting bit of evidence that can be deduced from a comparison between the two compact car classes. It indicates the gasoline penalty for driving with an automatic gearshift of two mpg. This, in my opinion, is a little too close and the average motorist would probably suffer a slightly greater loss, more like a reduction of at least three, and possibly four, mpg.

Another comparison of broad interest to car buyers is the one that can be drawn between cars equipped with six-cylinder and V-8 engines. The class average for the standard-size Sixes was 22 mpg, while the same makes of cars (Ford, Chevrolet, Plymouth, etc.) with V-8's was close to 20 mpg.

The difference appears to be a relatively insignificant two mpg. Yet, as pointed out previously, the extra power of the V-8's, which is generally called upon in ordinary driving, widens the gap between the Vee's and the inlines. So a true difference would be at least three mpg and in most cases range up to four or five mpg. /MT

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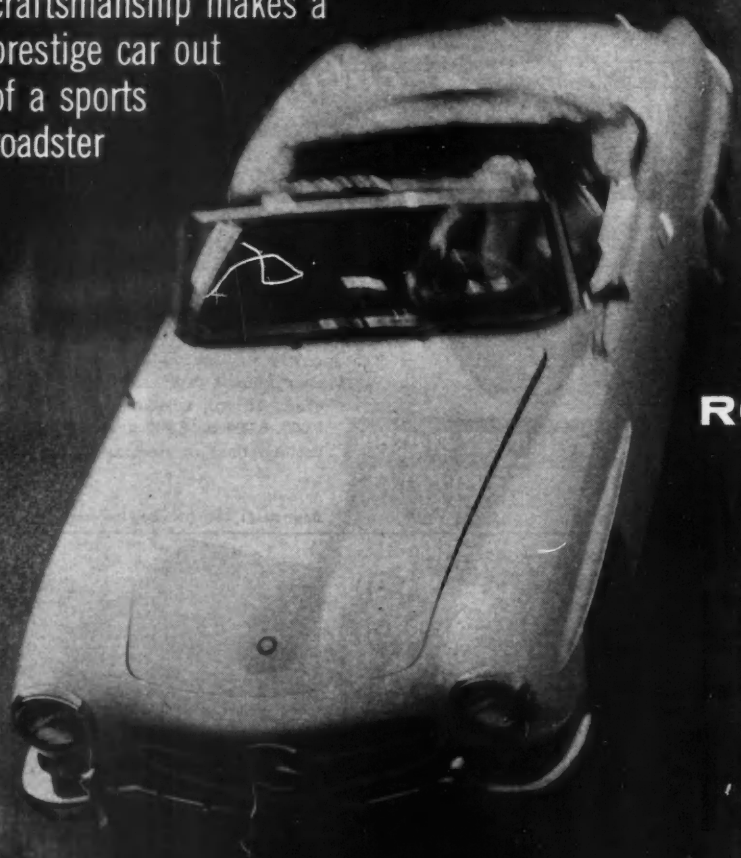
craftsmanship makes a prestige car out of a sports roadster



ROAD TEST

rcedes-
nz
0-SL

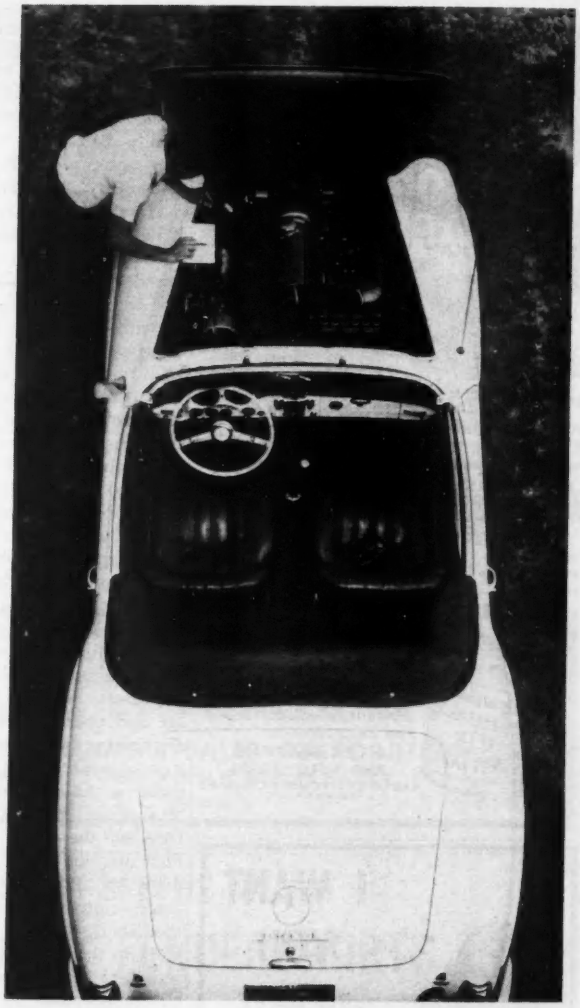
Perhaps no other automotive symbol commands such world-wide respect and adoration as the three-pointed Mercedes-Benz star. Down through the years the legendary emblem has been carried by cars pioneering greatness and quality, preceded by awesome victories wherever any type of automotive event was held. The star has become characteristic of highest quality, superb workmanship, unerringly engineered innovations, and tasteful though subdued styling. And just as these hallmarks have been borne proudly by the cars from Stuttgart since before the turn of the century, so are they borne by the '61 products from this revered manufacturer.

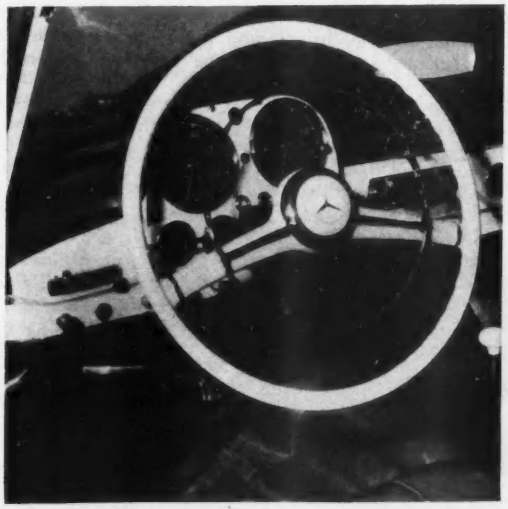
Though Mercedes-Benz produces many models all the way up to royalty's limousines, a 190-SL roadster was selected for test purposes as this relatively inexpensive model is rapidly gaining new heights of prestige and popularity here in the United States. The big, expensive, relatively low-production cars turned out by Detroit actually flow in such vast quantities that true distinction has become almost non-existent, so some of those who revel in automotive discrimination are beginning to turn to the nimble 190's as their personal mark of attainment.

A mere first glance at the 190-SL is sufficient to reveal the car's watch-like quality. Doors, deck lid and hood all fit with hair-line precision and there is no evidence that chrome trim or other adornment required a forceful, haphazard fit. The car stands firmly planted on widely spaced wheels giving the impression that it is ready to do all that is asked of it without a hesitant murmur.

That the car remains so little changed from the models that have preceded it is proof enough that the car is good as is; that an annual or seasonal face-lifting is not necessary for the public's accolades. With Mercedes, change isn't made for the sake of change; the product was considered so superb when originally designed that to alter it would be akin to losing face. As equally important a factor to prospective buyers who must look to their personal economics before buying is the car's continually high resale value.

The 190-SL (SL for super light) is a physically small car by U.S. standards, yet entrance is as easy with the top up as down,





Though the four-cylinder engine has an overhead cam and develops a terrific output for its size, the overall weight of the car prevents it from being a top performer. The instrumentation is extremely thorough; whole dash area is well finished.

MOTOR TREND TEST DATA

TEST CAR:	Mercedes-Benz 190-SL
BODY TYPE:	Two-passenger roadster
BASE PRICE:	$5032
ENGINE TYPE:	Ohc Four
DISPLACEMENT:	115.75 cubic inches
COMPRESSION RATIO:	8.5-to-1
CARBURETION:	Dual two-barrel
HORSEPOWER:	120 @ 5800 rpm
TRANSMISSION:	Four-speed manual
REAR AXLE RATIO:	3.9
GAS MILEAGE:	19.4 miles per gallon
ACCELERATION:	0-30 mph in 4.4 seconds, 0-45 mph in 8.0 seconds and 0-60 mph in 14.2 seconds
SPEEDOMETER ERROR:	Indicated 30, 45 and 60 mph are actual 28.4, 42.8 and 57 mph, respectively
ODOMETER ERROR:	Indicated 100 miles is actual 99 miles
WEIGHT-POWER RATIO:	20.9 lbs. per horsepower
HORSEPOWER PER CUBIC INCH:	1.03

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MERCEDES-BENZ 190-SL

and both driver and passenger have ample leg-, hip- and headroom. The steering wheel, though at first seemingly uncomfortably placed, can be straight-armed, as many aficionados like to drive, yet one's legs reach easily and comfortably the widely spaced pedals that happily seem intended to accommodate American-sized feet. Fore and aft seat adjustment is termed more than adequate, and drivers will praise the 190's seating comfort.

Facing the driver is an impressive and business-like array of switches, gauges and knobs more intended, probably, to overwhelm the owners of lesser cars than anything else. Several of the controls could be integrated; for example, the key switch and starter button which Detroit long ago combined but which Stuttgart prefers to leave as two. Just a flicker of the eyes will tell the driver his speed and engine rpm, as these large, twin dials occupy preferred dashboard space, but one unaccustomed to the car must search for other gauges.

The builder's attention to smallest details is evident in such things as the dash-top ashtray with its dual lids — the linkage and operation not unlike the viewer mechanism on a German reflex camera. And a white light winks on when the choke is pulled. Everywhere is the mark of superior craftsmanship; the fit of the facia to the body, the perfectly fitting floor mat, the solid "chunk" of a slammed door, the positive engagement of shift lever, clutch and other controls. Why then, one wonders, the placement of the clock in the glove box lid, where it is subjected to easy damage through repeated slammings, and the numerous turns required to raise and lower the door windows?

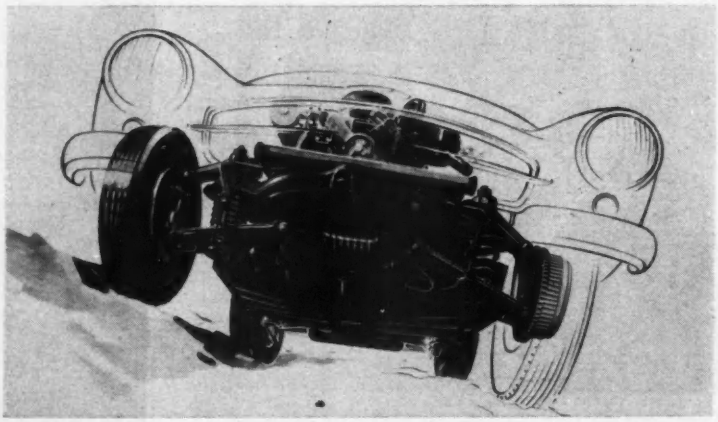
An observation was made that the car was apparently built for the narrow, crooked, often hilly roads of Europe rather than the expressways and city traffic of this country. Steering is insufficiently quick to place the 190-SL in the true sports car category — though it feels quick to one accustomed to domestic automobiles — and its four-speed transmission ratios require constant shifting, via the floor lever, in heavy American traffic.

The soft top folds in true do-it-yourself fashion and will be somewhat disconcerting to Americans who for years have performed this chore by pressing a button; but in a top-folding race with a new domestic convertible the Mercedes won hands down as the top was released, folded back, and the boot installed even before the automatic counterpart had been lowered to its compartment.

Though the car, once again, is small even by U.S. compact standards, there is an amazing amount of luggage space. The trunk area is spacious and its depths easily accessible, and behind the individual seats there is another area for equipment-carrying drivers. The roomy glove box is augmented by a storage well in each door, the top of which serves as an arm-rest and door-pull, but the real value of this space is questioned through inherent dirt-catching characteristics and an uncomfortable forearm.

The 190-SL is placed in the prestige category not solely by virtue of its obvious quality and soundness of design, but also by its price tag — over $5,000. Its cost, then, together with the apparent loving care in design and construction, makes one question the non-counterbalanced hood and deck lid, both of which must be supported by rods when more than one-handed access under each is required.

Mercedes-Benz automobiles are seldom tinkered with by their owners, as evidenced by the winces of specialized mechanics who break into tears at the thought of anyone less than the holder



Mercedes' engineering thoroughness is shown in the structure and running gear of the 190-SL. The engine, front springs and steering are all mounted on a sub-frame, which absorbs extra road shock and can be removed for servicing.

of a master mechanic's degree — issued in Stuttgart, of course — delving into the 190's intricacies. But should the white-gloved owner have to go beneath the hood he will find everything readily accessible and, if the function or maintenance of a particular component is questioned, most are labeled as to use, settings, etc., — albeit in German.

There is nothing perfect, it is said, so it is natural to assume the 190 will have at least one shortcoming. And it does — but why it's available power rather than something of a lesser nature is hard to understand. The car seriously lacks accelerative ability, a factor which obviously goes hand-in-hand with relatively few cubic inches, yet several lesser cars have, over the years, learned to reduce this handicap without a serious increase in engine displacement. It's not the engine's fault that power is lacking — 115.75 cubic inches produce 120 hp at 5800 rpm — but the problem is merely one of powering too heavy a car. The SL tag implies low weight, but the 190 tips the scales just short of 3,000 pounds. Once the Four is taken above 2250 rpm, though, the potential of the overhead cam begins to show itself, and performance from here up is good. But when asked to charge off the line, the car just doesn't.

At this point one begins to realize that the 190-SL is not intended to be a sports car in the term's true sense, but rather an adequately performing sports/tourer. Nevertheless, Mercedes-Benz has retained racing memories, for the windshield and its supporting posts, which at first glance appear integral with the cowl, are entirely removable to reduce frontal area.

The now-famous, single-joint Mercedes design points out the virtues in independent rear suspension, for the unit provides a comfortable yet firm and thoroughly stable ride, and cornering is actually fun. The car goes where it's steered almost totally regardless of road conditions, configurations, or the car's speed. The general chassis layout, with sub-frame construction, the singular rear end, the front suspension and the superior braking system, all developed through years of M-B racing participation, doubtlessly provide the 190-SL with its fine riding qualities and cornering abilities — though delightfully free of an out-and-out racing car's jarring. All of this points up that Mercedes has capitalized engineering-wise on its long racing history instead of using the firm's countless victories as product advertisement and nothing else.

Having once driven a Mercedes 190-SL, those who drive for the pure joy of driving can happily resign themselves that here is a car not for competition — which it doesn't really claim to be — but a car which is profoundly satisfying and, with its world-renowned craftsmanship and sheer quality, appealing in the fullest sense of the word. /MT

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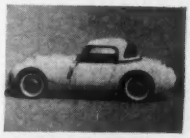
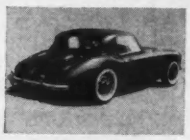
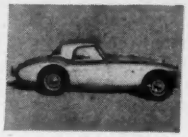
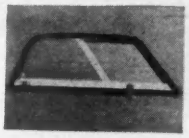
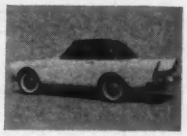

A/H Sprite thru 61

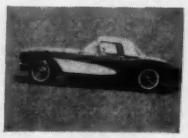

A. Healey thru 56


A. Healey thru 61

Porsche thru 61


Double sliding side panel


Sunbeam Alpine Top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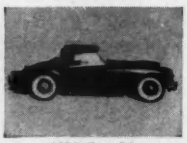
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ENDURANCE AT A RECORD PACE

SEBRING '61

photo story by Jerry McNamara and Warren Ballard

ENDURANCE RACES are usually won by those who persevere and can endure — a fact that will surprise no one. The 1961 12 Hours of Endurance at Sebring, Florida was, then, typical except that while the leading cars did both, they ran like they were in a sprint race. The final tally pointedly bears this out: The lead car drove 210 laps, 1092 miles, at an average speed of 91.306 mph, which was 12 more laps, 50 more miles, and a good five mph faster than the track record.

The winners of this fantastic event were Californian Phil Hill and Olivier Gendebien, the ex-Belgian now living in France. Their car was an Italian red Ferrari, the car being new, the engine the tried and proven V-12.

In second place was another Californian, Richie Ginther, driving with Count Wolfgang Von Tripps, in another factory Ferrari. This car was also a V-12 but was taken over from the team of Mairesse/Baghetti in the third hour, when the new shoebox-shaped, rear-engined V-6 broke a steering component. In third were the two young (19 and 21) Mexican prodigies, Pedro and Ricardo Rodriguez in a Ferrari Testa Rossa.

It was the Rodriguez brothers who sparked the whole race by setting a blistering pace early in the day and keeping it up right to the very last second. It was only just before the ninth hour that Hill and Gendebien were able to take over from the leading Rodriguez Ferrari when it was pitted for a lengthy period for repair to the electrical system and replacement of well-worn brake shoes. With the stop dropping them back to third place, Ricardo took the car out and drove like a boy possessed in an effort to make up for lost time.

Picking up four and five seconds a lap,

continued on page 74

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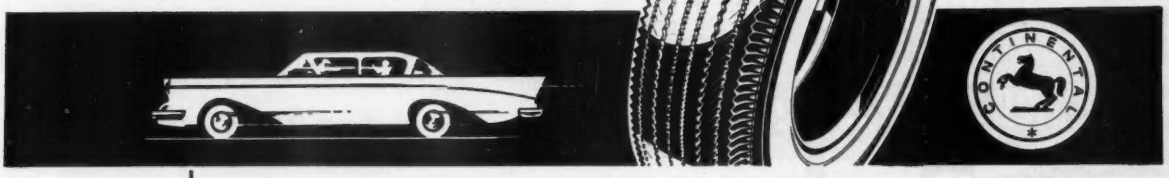

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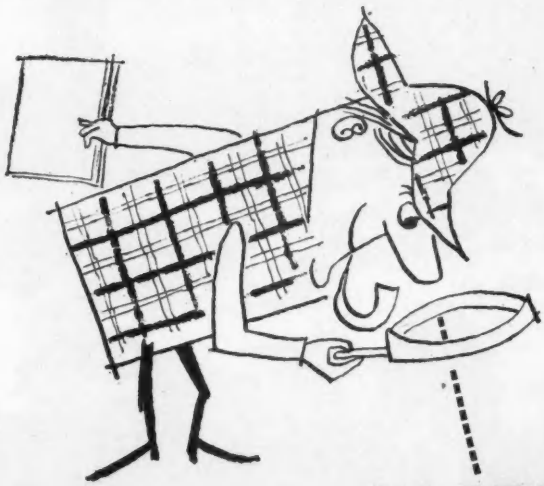

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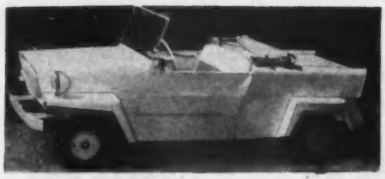

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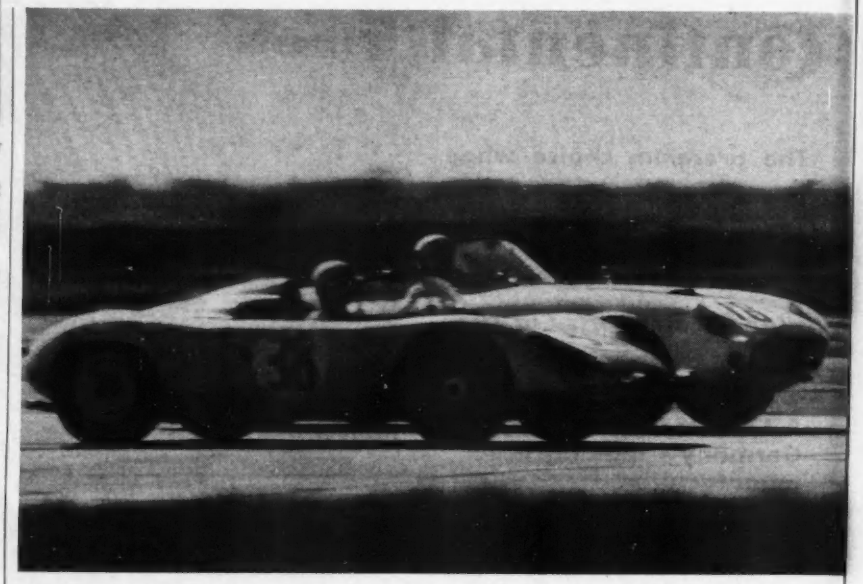


AN RS-60 PORSCHE (FRONT) WAGES A TORRID BATTLE WITH THE NEWMAN-PUBLICKER FERRARI.

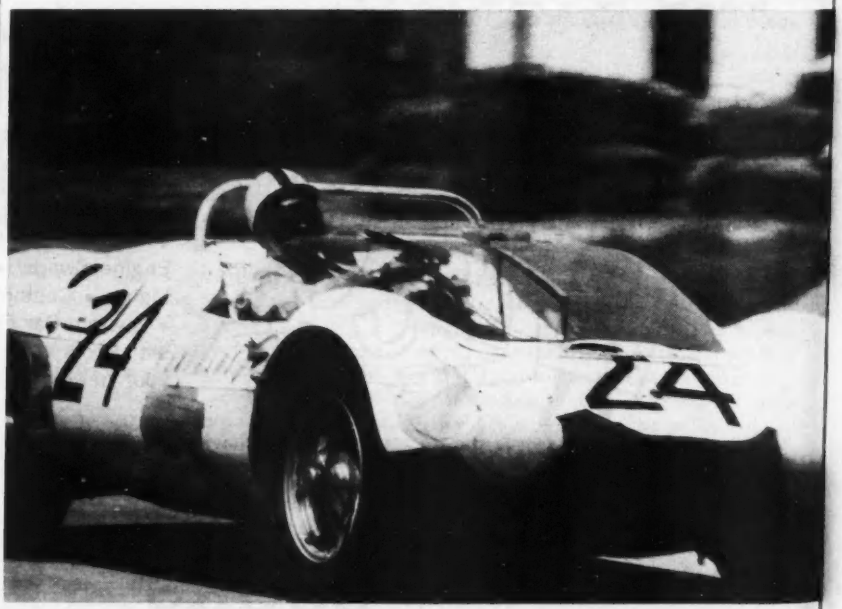
SEBRING '61

at one point he was timed as turning a 3:20 lap, only eight seconds off the course's lap record set by Stirling Moss. But 45 minutes before the end of the race, just as Rodriguez was breathing heavily on the second place Ginther/Von Tripps Ferrari, he overplayed his hand and lost more precious time extricating himself from the hay bales.

The finish was as hairy as the rest of the day. While Hill and Gendebien had a two-lap lead in first, it appeared that Rodriguez had made up his lost time and was in second, especially after he had brutally pushed the Ferrari to its limit to get by Ginther leading into the pit straight. But a check of the lap charts proved that Rodriguez still had almost a lap to make up and was forced to settle for third.

As is also typical of races of this type, there were others that shared the Rodri-

continued on page 76



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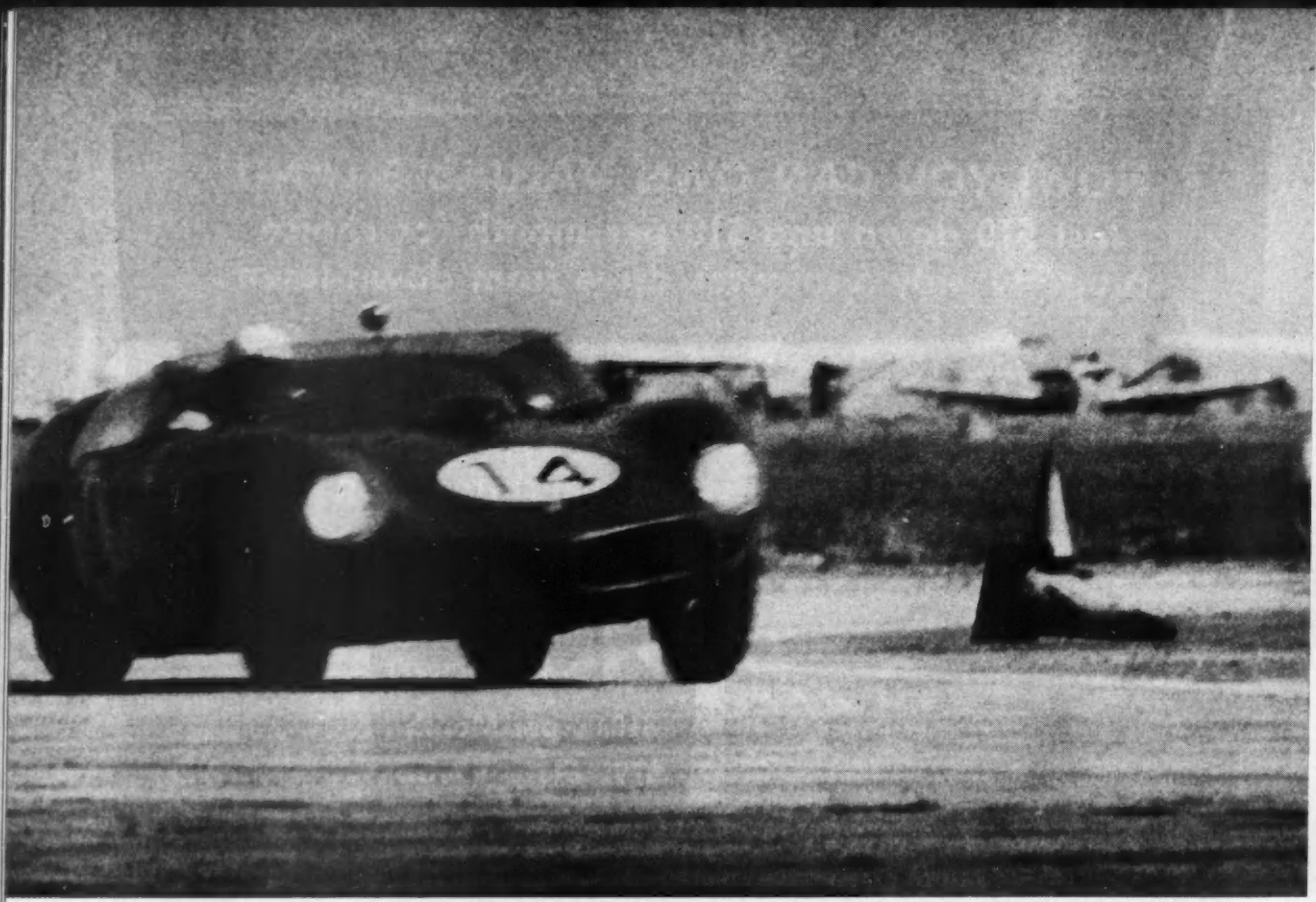


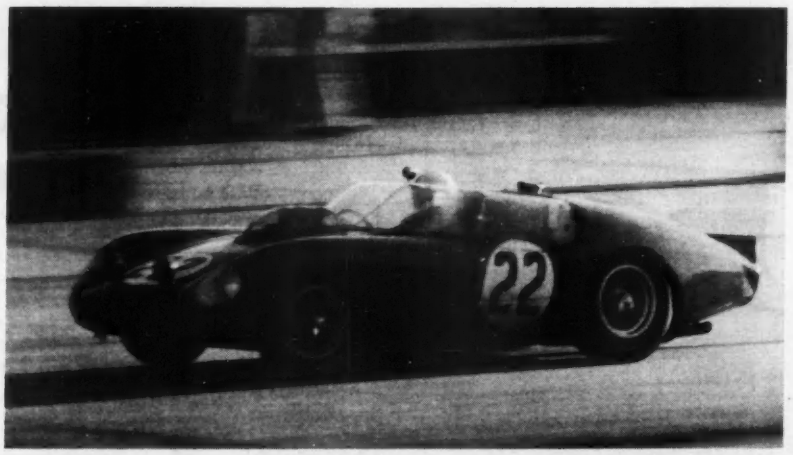
THE WINNING HILL-GENDEBIEN TRI/61 V-12 FERRARI TAKES A FLAT CORNER IN FRONT OF THE CAUSEY-STEAR TYPE 61 MASERATI.

guez' disappointment, not the least of whom was Stirling Moss. His day started badly and did not improve much as it went along. The Moss jinx began when his Camoradi Tipo 61 Maserati refused to start (for the second year in a row) at the beginning of the race. This time it was a dead battery, and by the time he was away he was a full lap behind the leaders. Making up a good five seconds a lap, and passing cars with great abandon, Moss was able to work the car up to second place by noon, when he was relieved by Graham Hill. But then Hill was forced out of the race by a broken exhaust system. Moss then took over Masten Gregory's rear-engined Tipo 63, which at the time was at the lower end of the first 10. Moss was in and out of pits almost immediately, and finally at 1:25 the last Camoradi Maserati was permanently retired with suspension trouble, which looked more like the whole frame had collapsed. Shaking his head resignedly, Moss left the pits and was last seen motoring leisurely around the outside of the course in his own car.

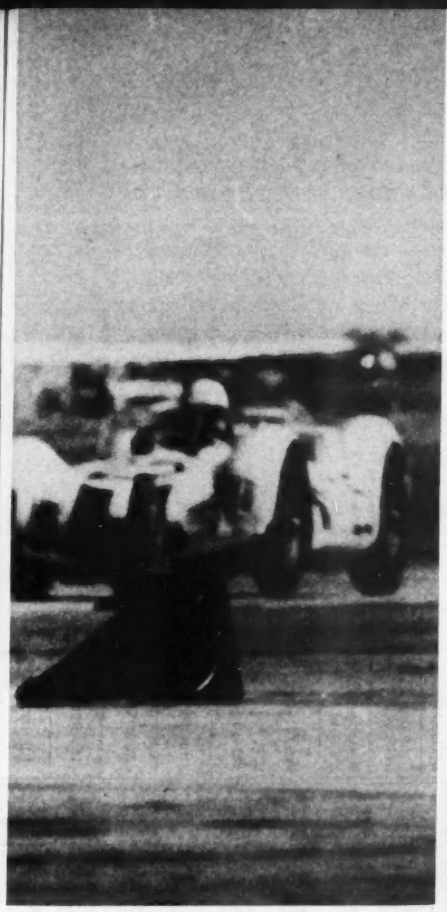
The second of the two rear-engined Tipo 63's entered at Sebring did a bit better, but it also did not finish the race. One of Briggs Cunningham's cars, and driven by Walt Hansgen and New Zealand's Bruce McLaren, this one lasted until 4:18, when it too retired, rear-end troubles getting the blame.

The coveted award for Gran Turismo cars also went to Ferrari with a Berlinetta coupe handily overpowering the favored Corvettes. Entered and driven by distaff journalist Denise McCluggage, with co-driver Allen Eager, they moved briskly throughout the day, although it was 6:00 o'clock before the powers-that-be at Sebring belatedly recognized the fact.

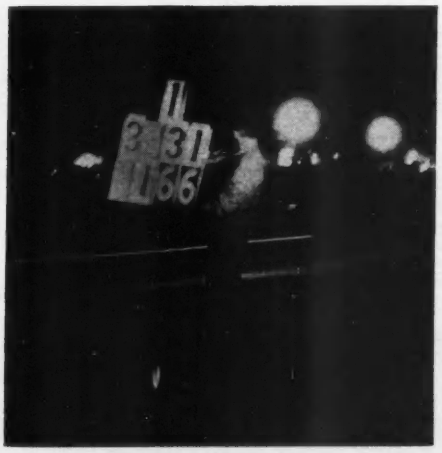
First on Index of Performance went this year to the superbly driven RS-61 Porsche of Bob Holbert and Roger Penske. Their win was exceptional, not only because it was over the vaunted factory-



THIS HALL-CONSTANTINE V-6 HAD HALF THE CYLINDERS OF THE WINNING FERRARI.



entered cars with such drivers as Bonnier, Herman and Barth, but because the little car was being pushed by a 1500 cc engine — as compared to the 1700 cc's in the factory cars. Holbert and Penske had wisely depended on the smaller engine's reputation for reliability as well as its comparative economy in the gasoline department. /MT



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MOTOR TREND'S 1961 CAR SPECIFICATIONS

All figures listed are for **four-door sedans.** If that body type **is not offered,** data for four-door hardtops **is listed.** Obvious **exceptions** are such cars as the **Thunderbird** and **Corvette.** All specifications are **the latest** as announced by the manufacturers. **Additions** and **corrections** will be made **each month** in order that our **readers may have** the most **complete** and **authoritative** figures on Detroit's **new cars.** (Entries marked "NA" contain information not available at the time of publication.)

	LENGTH	WIDTH	HEIGHT	WHEELBASE	TREAD		TIRE SIZE	MINIMUM ROAD CLEARANCE	TURNING CIRCLE	SHIPPING WEIGHT	FRONT SEAT			REAR SEAT		
					FRONT	REAR					HEAD ROOM	LEG ROOM	HIP ROOM	HEAD ROOM	LEG ROOM	HIP ROOM
BUICK Le Sabre, Invicta	213.2	78.0	56.3	123.0	62.0	61.0	7.60 x 15	5.5	44.0	4129	34.5	44.8	63.3	34.1	41.4	63.2
Electra	219.2	78.0	57.0	126.0	62.0	61.0	8.00 x 15	5.7	45.7	4333	34.3	44.8	63.6	34.5	44.0	63.2
BUICK Special	188.4	71.3	52.8	112.1	56.0	56.0	6.50 x 13	4.9	38.1	2610	33.9	44.6	58.6	33.7	37.8	58.2
CADILLAC 60	222.0	79.8	56.6	129.5	61.0	61.0	8.00 x 15	5.1	43.0	4770	34.4	46.0	63.3	34.1	44.5	63.1
62	222.0	79.8	56.3	129.5	61.0	61.0	8.00 x 15	5.1	43.0	4680	34.4	46.0	63.3	34.1	44.5	63.1
75	242.3	80.6	59.1	149.8	61.0	61.0	8.20 x 15	6.2	48.0	5390	36.3	44.2	65.5	34.8	NA	60.1
CHEVROLET	209.3	78.4	55.5	119.0	60.3	59.3	7.50 x 14	6.0	40.8	3500	34.5	45.0	63.5	34.0	42.0	63.5
CHEVROLET CORVAIR	180.0	67.0	51.5	108.0	54.0	54.0	6.50 x 13	6.0	39.0	2355	33.5	44.0	58.5	33.5	36.5	58.0
CHEVROLET CORVETTE	176.7	70.4	52.2	102.0	57.0	59.0	6.70 x 15	6.7	37.0	2905	37.0	46.4	59.6	- - -	- - -	- - -
CHRYSLER Newport, Windsor	215.6	79.4	54.9	122.0	61.0	59.7	8.00 x 14	5.2	44.0	NA	37.6	45.1	63.8	38.1	42.4	62.8
New Yorker	219.8	79.4	55.6	126.0	61.2	60.0	8.50 x 14	5.7	46.6	NA	37.6	45.3	63.8	38.1	42.4	62.8
300-G	219.8	79.4	55.1	126.0	61.2	60.0	8.00 x 15	5.7	46.6	NA	38.1	45.6	- - -	38.1	35.4	- - -
COMET	194.8	70.4	54.5	114.0	55.0	54.5	6.00 x 13	5.9	39.9	2440	38.6	43.9	57.0	37.6	40.8	56.7
DODGE	212.5	78.7	54.9	122.0	61.5	60.2	8.00 x 14	5.3	43.9	3700	37.6	45.1	63.8	38.1	42.4	62.8
DODGE DART	209.4	78.7	54.8	118.0	61.5	60.2	7.50 x 14	5.1	42.3	3510	37.6	45.1	63.8	38.0	42.1	62.9
DODGE LANCER	188.8	72.3	53.3	106.5	56.0	55.5	6.50 x 13	5.4	37.9	2595	37.9	42.8	56.8	37.4	39.7	56.9
FORD	209.9	79.9	55.0	119.0	61.0	60.0	7.50 x 14	5.5	41.0	3683	38.2	45.3	62.1	37.6	43.3	63.5
FORD FALCON	181.2	70.3	54.5	109.5	55.0	54.5	6.00 x 13	5.9	38.3	2289	38.8	44.6	57.1	37.3	39.4	57.0
FORD THUNDERBIRD	205.0	75.9	52.5	113.0	61.0	60.0	8.00 x 14	5.2	40.2	3958	37.5	43.9	59.0	37.6	40.4	52.3
IMPERIAL	227.3	81.7	56.7	129.0	61.8	62.2	8.20 x 15	5.6	48.2	NA	38.9	46.9	61.0	38.3	42.9	60.2
LINCOLN CONTINENTAL	212.4	78.6	53.5	123.0	62.1	61.0	9.00 x 14	5.5	46.7	4771	38.6	44.0	59.7	38.2	40.0	60.7
MERCURY	214.6	79.9	55.0	120.0	61.0	60.0	7.50 x 14	5.7	41.6	3762	38.2	45.3	62.1	37.6	43.3	63.5
OLDS Dynamic 88, Super 88	212.0	77.2	55.8	123.0	61.0	61.0	8.00 x 14	5.6	43.0	4024	34.5	44.4	63.3	34.4	41.7	63.3
98	218.0	77.2	56.6	126.0	61.0	61.0	8.50 x 14	5.8	43.8	4208	35.2	44.1	63.6	34.4	41.7	63.2
OLDSMOBILE F-85	188.2	71.6	52.6	112.0	56.0	56.0	6.50 x 13	4.9	37.0	2566	34.0	44.0	58.6	33.9	37.8	58.2
PLYMOUTH	209.5	80.0	54.6	118.0	60.9	59.6	7.00 x 14	4.7	42.2	NA	33.3	45.1	63.8	33.5	42.1	62.9
PLYMOUTH VALIANT	183.7	70.4	53.3	106.5	56.0	55.5	6.50 x 13	5.4	37.1	2695	33.6	42.8	56.8	33.1	39.8	56.9
PONTIAC Catalina, Ventura	210.0	78.2	55.9	119.0	62.5	62.5	8.00 x 14	6.0	46.0	3795	38.8	45.1	63.2	37.9	40.6	63.2
Star Chief, Bonneville	217.0	78.2	55.9	123.0	62.5	62.5	8.00 x 14	6.0	46.6	3895	38.8	44.9	63.2	37.9	40.9	63.0
PONTIAC TEMPEST	189.3	72.2	53.5	112.0	56.8	56.8	6.00 x 15	6.0	41.0	2800	38.3	44.1	58.6	37.1	37.8	58.2
RAMBLER AMBASSADOR	199.0	73.6	56.9	117.0	57.8	59.1	8.00 x 14	5.5	39.8	3430	36.0	43.0	59.8	34.5	40.0	60.1
RAMBLER AMERICAN	173.0	70.0	56.2	100.0	54.6	55.0	6.00 x 15	5.3	36.0	2544	35.0	44.0	58.0	33.0	37.5	45.3
Classic V-8	189.9	72.4	57.1	108.0	58.8	59.1	7.50 x 14	5.4	37.6	3255	36.0	43.0	59.8	34.5	40.0	60.1
Classic 6	189.9	72.4	57.3	108.0	57.8	59.0	6.50 x 15	5.6	37.3	2933	36.0	43.0	59.8	34.5	40.0	60.1
STUDEBAKER HAWK	204.0	71.4	55.5	120.5	57.4	56.6	6.70 x 15	6.8	41.0	3207	34.5	44.0	59.5	33.7	37.0	58.0
STUDEBAKER LARK	175.0	71.4	56.5	108.5	57.4	56.6	6.50 x 15	6.1	37.5	2966	35.2	43.5	59.5	34.7	40.0	59.0
LARK Cruiser	179.0	71.4	56.5	113.0	57.4	56.6	6.50 x 15	6.1	39.0	3000	35.2	43.5	59.5	34.7	44.0	59.5

1961 BODY & CHASSIS DIMENSIONS

	TYPE	HORSEPOWER	TORQUE	CUBIC INCHES	BORE AND STROKE	COMPRESSION	CARBURETION	AXLE RATIOS		
								AUTOMATIC	MANUAL	OPTIONAL
BIG CARS										
BUICK Le Sabre (standard)	V-8	250 @ 4400	384 @ 2400	364	4.13 x 3.40	10.25	1 2-bbl.	3.07	---	---
Le Sabre (optional)	V-8	235 @ 4400	375 @ 2400	364	4.13 x 3.40	9.0	1 2-bbl.	3.07	---	---
Le Sabre (optional)	V-8	300 @ 4400	405 @ 2800	364	4.13 x 3.40	10.25	1 4-bbl.	3.23	---	---
Invicta, Electra, Electra 225	V-8	325 @ 4400	445 @ 2800	401	4.19 x 3.64	10.25	1 4-bbl.	3.23	---	---
CADILLAC 60, 62 & 75	V-8	325 @ 4800	430 @ 3100	390	4.00 x 3.875	10.5	1 4-bbl.	2.94	---	3.21, 3.77
CHEVROLET Six	6	135 @ 4000	217 @ 2000	235	3.56 x 3.94	8.25	1 1-bbl.	3.36	3.36	3.55, 3.70
170	V-8	170 @ 4200	275 @ 2200	283	3.87 x 3.00	8.5	1 2-bbl.	3.08, 3.36	3.36	3.70
230	V-8	230 @ 4800	300 @ 3000	283	3.87 x 3.00	9.5	1 4-bbl.	3.36	3.36	3.70
250	V-8	250 @ 4400	355 @ 2800	348	4.12 x 3.25	9.5	1 4-bbl.	3.08	3.36	3.08
280	V-8	280 @ 4800	355 @ 3200	348	4.12 x 3.25	9.5	3 2-bbl.	3.08	3.36	---
305	V-8	305 @ 5200	355 @ 3400	348	4.12 x 3.25	9.5	1 4-bbl.	3.55	3.36	---
340	V-8	340 @ 5800	362 @ 3600	348	4.12 x 3.25	11.25	1 4-bbl.	---	3.70	---
350	V-8	350 @ 6000	364 @ 3600	348	4.12 x 3.25	11.25	3 2-bbl.	---	3.70	---
360	V-8	360 @ 5800	409 @ 3600	409	4.31 x 3.50	11.25	1 4-bbl.	---	3.36	3.70, 4.11, 4.56
CHEVROLET CORVETTE 230	V-8	230 @ 4800	300 @ 3000	283	3.87 x 3.00	9.5	1 4-bbl.	3.55	3.36	3.70, 4.11, 4.56
245	V-8	245 @ 5000	300 @ 3800	283	3.87 x 3.00	9.5	2 4-bbl.	3.55	3.36	3.70, 4.11, 4.56
270	V-8	270 @ 6000	285 @ 4200	283	3.87 x 3.00	9.5	2 4-bbl.	---	3.36	3.70, 4.11, 4.56
275	V-8	275 @ 5200	305 @ 4400	283	3.87 x 3.00	11.0	F.I.	---	3.36	3.70, 4.11, 4.56
315	V-8	315 @ 6200	295 @ 5100	283	3.87 x 3.00	11.0	F.I.	---	3.36	3.70, 4.11, 4.56
CHRYSLER Newport	V-8	265 @ 4400	380 @ 2400	361	4.12 x 3.38	9.0	1 2-bbl.	2.93	3.58	---
Windsor	V-8	305 @ 4600	410 @ 2400	383	4.25 x 3.38	10.0	1 2-bbl.	2.93	3.58	---
New Yorker	V-8	350 @ 4600	470 @ 2800	413	4.18 x 3.75	10.1	1 4-bbl.	2.93	---	---
300-G	V-8	375 @ 5000	495 @ 2800	413	4.18 x 3.75	10.1	2 4-bbl.	3.23	3.23	---
DODGE Polara V-8	V-8	265 @ 4400	380 @ 2400	361	4.12 x 3.38	9.0	1 2-bbl.	2.93	3.23	3.23
D-500	V-8	325 @ 4600	425 @ 2800	383	4.25 x 3.38	10.0	1 4-bbl.	3.23	3.23	---
D-500 w/Ram Induction	V-8	330 @ 4800	460 @ 2800	383	4.25 x 3.38	10.0	2 4-bbl.	3.23	3.23	---
DODGE DART Six	6	145 @ 4000	215 @ 2800	225	3.40 x 4.125	8.2	1 1-bbl.	3.31	3.54	3.58
V-8	V-8	230 @ 4400	340 @ 2400	318	3.91 x 3.31	9.0	1 2-bbl.	3.31	3.58	3.31
V-8 Power Pack	V-8	260 @ 4400	345 @ 2800	318	3.91 x 3.31	9.0	1 4-bbl.	3.31	---	---
D-500	V-8	305 @ 4800	395 @ 3000	361	4.12 x 3.38	9.0	1 4-bbl.	3.31	NA	---
Police Special	V-8	325 @ 4600	425 @ 2800	383	4.25 x 3.38	10.0	1 4-bbl.	3.23	3.23	---
D-500 w/Ram Induction	V-8	330 @ 4800	460 @ 2800	383	4.25 x 3.38	10.0	2 4-bbl.	3.23	3.23	---
FORD Six	6	135 @ 4000	200 @ 2000	223	3.62 x 3.60	8.4	1 1-bbl.	3.56	3.56	3.89
292	V-8	175 @ 4200	279 @ 2200	292	3.75 x 3.30	8.8	1 2-bbl.	3.00	3.56	3.89
352	V-8	220 @ 4400	336 @ 2400	352	4.00 x 3.50	8.9	1 2-bbl.	3.00	3.56	3.56
390 Special	V-8	300 @ 4600	427 @ 2800	390	4.05 x 3.78	9.6	1 4-bbl.	3.00	3.56	3.56
390 Police Special	V-8	330 @ 5000	427 @ 3200	390	4.05 x 3.78	9.6	1 4-bbl.	3.00	3.56	3.89
390 Super	V-8	375 @ 6000	430 @ 3400	390	4.05 x 3.78	10.6	1 4-bbl.	NA	3.56	3.89
FORD THUNDERBIRD	V-8	300 @ 4600	427 @ 2800	390	4.05 x 3.78	9.6	1 4-bbl.	3.00	---	---
IMPERIAL	V-8	350 @ 4600	470 @ 2800	413	4.18 x 3.75	10.1	1 4-bbl.	2.93	---	---
LINCOLN CONTINENTAL	V-8	300 @ 4100	465 @ 2000	430	4.30 x 3.70	10.0	1 2-bbl.	2.89	---	---
MERCURY Six	6	135 @ 4000	200 @ 2000	223	3.62 x 3.60	8.4	1 1-bbl.	3.56	3.56	3.89
292	V-8	175 @ 4200	279 @ 2200	292	3.75 x 3.30	8.8	1 2-bbl.	3.00	3.56	3.89
352	V-8	220 @ 4400	336 @ 2400	352	4.00 x 3.50	8.8	1 2-bbl.	3.00	3.56	3.89
390	V-8	300 @ 4600	427 @ 2800	390	4.05 x 3.78	9.6	1 4-bbl.	3.00	3.56	3.89
OLDSMOBILE Dynamic 88	V-8	250 @ 4400	405 @ 2400	394	4.13 x 3.69	8.8	1 2-bbl.	2.87	3.42	---
Super 88,98	V-8	325 @ 4600	435 @ 2800	394	4.13 x 3.69	10.0	1 4-bbl.	3.08, 3.23	3.42	---
Starfire	V-8	330 @ 4600	440 @ 2800	394	4.13 x 3.69	10.25	1 4-bbl.	3.42	---	---
PLYMOUTH Six	6	145 @ 4000	215 @ 2800	225	3.40 x 4.125	8.2	1 1-bbl.	3.31	3.54	---
Fury	V-8	230 @ 4400	340 @ 2400	318	3.91 x 3.31	9.0	1 2-bbl.	2.93	3.58	---
Super Fury	V-8	260 @ 4400	345 @ 2800	318	3.91 x 3.31	9.0	1 4-bbl.	2.93	3.58	---
Golden Commando	V-8	305 @ 4800	395 @ 3300	361	4.12 x 3.38	9.0	1 4-bbl.	3.31	3.31	---
Sonoramic Commando	V-8	330 @ 4800	460 @ 2800	383	4.25 x 3.38	10.0	2 4-bbl.	3.31	3.31	---
PONTIAC Catalina, Ventura, Star Chief	V-8	215 @ 3600	390 @ 2000	389	4.06 x 3.75	8.6	1 2-bbl.	---	3.23	3.08, 3.42
Bonneville (optional other series)	V-8	235 @ 3600	402 @ 2000	389	4.06 x 3.75	8.6	1 4-bbl.	---	3.23	3.08, 3.42
Catalina, Ventura w/Hydramatic	V-8	267 @ 4200	405 @ 2400	389	4.06 x 3.75	10.25	1 2-bbl.	2.69, 2.87	---	3.08, 2.56, 2.69
Catalina, Ventura w/Hydramatic (opt)	V-8	287 @ 4400	417 @ 2400	389	4.06 x 3.75	10.25	1 4-bbl.	2.69, 2.87	---	2.56, 3.08, 2.96
Star Chief w/Hydramatic	V-8	283 @ 4400	413 @ 2800	389	4.06 x 3.75	10.25	1 2-bbl.	2.87	---	2.69, 3.08
Bonneville w/Hydramatic	V-8	303 @ 4600	425 @ 2800	389	4.06 x 3.75	10.25	1 4-bbl.	2.87	---	2.69, 3.08
All series w/Hydramatic (optional)	V-8	230 @ 4000	380 @ 2000	389	4.06 x 3.75	8.6	1 2-bbl.	2.56	---	---
All series (optional)	V-8	318 @ 4600	430 @ 3200	389	4.06 x 3.75	10.75	3 2-bbl.	2.69	3.23	2.56, 2.69, 3.08, 3.42
All series (optional)	V-8	333 @ 4800	425 @ 2800	389	4.06 x 3.75	10.75	1 4-bbl.	3.08	3.42	3.64
All series (optional)	V-8	348 @ 4800	430 @ 3200	389	4.06 x 3.75	10.75	3 2-bbl.	3.08	3.42	3.64
RAMBLER Ambassador	V-8	250 @ 4700	340 @ 2600	327	4.00 x 3.25	8.7	1 2-bbl.	2.87	3.54	3.15, 4.10
Ambassador Power Pack	V-8	270 @ 4700	360 @ 2600	327	4.00 x 3.25	9.7	1 4-bbl.	3.15	3.54	2.87, 4.10
STUDEBAKER Hawk V-8	V-8	210 @ 4500	300 @ 2800	289	3.60 x 3.60	8.8	1 2-bbl.	3.07	3.31	3.54
Hawk V-8 Power Pack	V-8	225 @ 4500	305 @ 3000	289	3.60 x 3.60	8.8	1 4-bbl.	3.07	3.31	3.54
COMPACT CARS										
BUICK SPECIAL	V-8	155 @ 4600	220 @ 2400	215	3.50 x 2.80	8.8	1 2-bbl.	3.08	3.36	---
Special	V-8	185 @ 4800	230 @ 3200	215	3.50 x 2.80	10.25	1 4-bbl.	3.36	3.36	---
CHEVROLET CORVAIR Turbo-Air	6	80 @ 4400	128 @ 2300	145	3.44 x 2.60	8.0	2 1-bbl.	3.27	3.27	3.55, 3.89
Super Turbo-Air	6	98 @ 4600	132 @ 2800	145	3.44 x 2.60	8.0	2 1-bbl.	3.27	3.27	3.55, 3.89
COMET 144	6	85 @ 4200	134 @ 2000	144	3.50 x 2.50	8.7	1 1-bbl.	3.50	3.50	3.23, 3.90
170	6	101 @ 4400	156 @ 2400	170	3.50 x 2.94	8.7	1 1-bbl.	3.50	3.20	3.23, 3.90
DODGE LANCER 170	6	101 @ 4400	155 @ 2400	170	3.40 x 3.125	8.2	1 1-bbl.	3.23	3.55	---
225	6	145 @ 4000	215 @ 2800	225	3.40 x 4.125	8.2	1 1-bbl.	3.23	3.55	---
FORD FALCON 144	6	85 @ 4200	134 @ 2000	144	3.50 x 2.50	8.7	1 1-bbl.	3.50	3.10	---
170	6	101 @ 4400	156 @ 2400	170	3.50 x 2.94	8.7	1 1-bbl.	3.50	3.20	---
OLDSMOBILE F-85	V-8	155 @ 4800	210 @ 3200	215	3.50 x 2.80	8.8	1 2-bbl.	3.23	3.07	---
F-85	V-8	185 @ 4800	230 @ 3200	215	3.50 x 2.80	10.25	1 4-bbl.	3.36	3.36	---
PLYMOUTH VALIANT	6	101 @ 4400	155 @ 2400	170	3.40 x 3.125	8.2	1 1-bbl.	3.23	3.55	3.23, 3.91
PONTIAC TEMPEST	4	110 @ 3800	190 @ 2000	194.5	4.06 x 3.75	8.6	1 1-bbl.	---	3.55	3.31, 3.73
Tempest w/Hydramatic	4	130 @ 4400	195 @ 2200	194.5	4.06 x 3.75	8.6	1 1-bbl.	3.08	---	3.55
Tempest Premium Fuel	4	120 @ 3800	202 @ 2000	194.5	4.06 x 3.75	10.25	1 1-bbl.	---	3.31	3.55
Tempest Premium Fuel w/Hydramatic	4	140 @ 4400	207 @ 2200	194.5	4.06 x 3.75	10.25	1 1-bbl.	3.08	---	3.55
Tempest w/4-bbl	4	155 @ 4800	215 @ 2800	194.5	4.06 x 3.75	10.25	1 4-bbl.	3.55	---	3.08, 3.73
Tempest V-8	V-8	155 @ 4600	220 @ 2400	215	3.50 x 2.80	8.8	1 2-bbl.	3.55	---	3.08, 3.73
RAMBLER AMERICAN Deluxe, Super	6	90 @ 3800	160 @ 1600	195	3.13 x 4.25	8.0	1 1-bbl.	3.31	3.31	3.78, 4.11
AMERICAN Custom	6	125 @ 4200	180 @ 1600	195	3.13 x 4.25	8.7	1 1-bbl.	2.87	3.31	3.78
CLASSIC Six	6	127 @ 4200	180 @ 1600	195	3.13 x 4.25	8.7	1 1-bbl.	3.31	3.78	4.11, 4.38
CLASSIC Six Power Pack	6	138 @ 4500	185 @ 1800	195	3.13 x 4.25	8.7	1 2-bbl.	3.31	3.78	4.11, 4.38
CLASSIC V-8	V-8	200 @ 4900	245 @ 2500	250	3.50 x 3.25	8.7	1 2-bbl.	3.15	4.10	3.55, 4.44
CLASSIC V-8 Power Pack	V-8	215 @ 4900	260 @ 2500	250	3.50 x 3.25	8.7	1 4-bbl.	3.15	4.10	3.55, 4.44
STUDEBAKER LARK Six	6	112 @ 4500	154 @ 2000	170	3.00 x 4.00	8.5	1 1-bbl.	3.73	3.73	3.54, 4.10, 4.56
LARK V-8	V-8	180 @ 4500	260 @ 2800	259	3.60 x 3.25	8.8	1 2-bbl.	3.07	3.07	3.31, 3.54
LARK V-8 Power Pack	V-8	195 @ 4500	265 @ 3000	259	3.60 x 3.25	8.8	1 4-bbl.	3.07	3.07	3.31, 3.54

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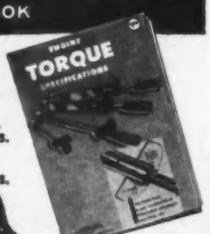

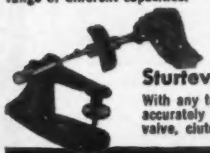

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SELL

BACK ISSUES: *Motor Trend, Hot Rod, Road & Track* — '49 inclusive to now. Very few missing; all in exc. cond. 25¢ ea. Inquiries invited. Complete your library now. Charles D. Gould, 1405 Cummins Parkway, Des Moines, Iowa.

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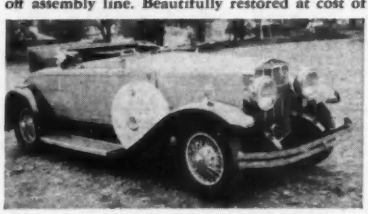
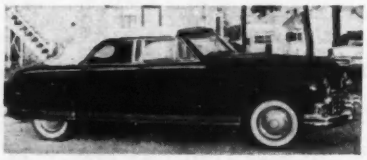


$3000. Turquoise & black finish. Spare parts. Drive anywhere. $2350. R. J. Hull, 10808 24th N.E., Seattle 55, Wash. Phone EMerson 3-5994.

'35 BUICK 61 4-dr. sed., with sidemounts. Rare model in very good mech. cond. Exc. body — new maroon paint, no rust. Passed '60 inspection; used daily. Extras. $300. Joe Weingartner, 1428 Jean Terr., Plainfield, N.J.

'39 JAGUAR SS in exc. running cond. Partially restored—new chrome, tires, battery, wire wheels. Can be seen at 307 Churchville Ave., Staunton, Va. Sgt. C. N. Ryder, Det. 4, HQ AMC, BMC, SATAF, Davis Monthan AFB, Ariz.

'50 FRAZER Manhattan 4-dr. conv. Exc. cond. — rebuilt mechanically thruout; drive any-



where. Needs paint & top. Any reasonable offer accepted — overseas in Navy. D. M. Fowler, 815½ E. Holt St., Ottumwa, Iowa.

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'02 OLDSMOBILE. Curved dash. 1 cylinder, tiller steering. Runs; ready to go. E. C. Houser, 820 Commercial SE, Salem, Ore.

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'40 CADILLAC 62 4-dr. sed. Orig. good running cond., new tires; paint faded. Straight stick. $350 or best offer. All inquiries answered. Art Steffen, 348 Bennett Rd., Hilton 2, N.Y.

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ratio axle. No rust. 60,000 actual mi.; driven weekly. $1200. Dick Schafer, 868 Jason Ave., Akron 14, Ohio.

'41 CADILLAC conv. Engine o'hauled; good paint, new tires & tubes. Needs repairs on clutch & top. Some body rust. $300. Bruce W. Sterner, R.D. #1, Quarryville, Pa.

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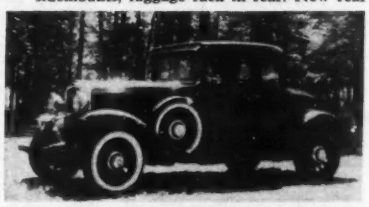

tires. Driven daily. Fine collector's item. $600. R. E. Robertson, 429 Munson Ave., Traverse City, Mich.

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'36 CHRYSLER Model C-8 Airstream cpe. 8-cyl., with o.d. Make offer. William Voigt, 1209 S. State St., Ottawa, Ill.

'24 DODGE rdstr. — 4-cyl., 12-volt, with silent starter. Black; runs good. $1250. Also Peerless 6 engine, Star 4 engine, '27 Buick engine. D. R. Blodgett, Box 1024, Peoria, Ill.

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'40 CADILLAC 62 4-dr. conv. Engine o'hauled; new 6-ply Denman Handcrafted tires. Midnight blue; completely orig. mint cond. $1500 firm. Bruce Beidelman, 1415 E. Lake St., Minneapolis, Minn.

'55 PACKARD Caribbean conv. Immac. cond. — former factory parade car. White & 2-tone green; torsion level suspension, full power. Orig. owner. O. Schmidt, 6701 N. Sioux Ave., Chicago 46, Ill.

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'39 CADILLAC 62 4-dr. sed. — rare model. Exc. tires & mech. cond. Needs paint, small body work. Drive anywhere. $500. Kenneth B. McNus, 552 Arthur Ave., Kalamazoo, Mich.

'49 CHRYSLER Town & Country. Green; orig. in every way — like new. One owner, always

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'29-'30 LA SALLE Fleetwood body 4-dr. conv. phaeton. 6 wheels; new top, new rubber. $750 firm. Kenneth K. Atkins, 6447 Cyprus Dr., North Olmsted, Ohio. Phone SP 7-4334.

'38 HUDSON TERRAPLANE 6-cyl. 2-dr. Good engine & mech. cond. All orig. parts; 5 wheels & tires. Body has no rust holes. Make offer. Ralph Jeffrey, 691 Oakdale Dr., Sarnia, Ont., Canada.

'37 LA SALLE V-8 rdstr. with rumbleseat. Black with white top. Engine recently o'hauled, grille ok; drive-away cond. Some extras. $560. Ivan E. Fleming, 2624 N. 36th, Boise, Ida.

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'27 WOLVERINE soft-top cpe., with rumbleseat. Body perf.; needs paint & top re-covered. $250. J. H. Hardesty, Rt. 1 Box 75, Lathrop, Calif.

'37 CADILLAC 70 V-8 with sidemounts. Perf. cond. thruout, mech. perf.; 40,000 orig. mi. Asking $950. R. C. Johnson, 1726 20th St. N.W., Washington 9, D. C.

'30 MODEL A rdstr. Exc. restoration — new top, tires, uph., shocks, bumpers, hubcaps, etc. 62,000 orig. mi. $1000 firm. Info & pix. Tom Van Riper, 3760 Polk, Dearborn 8, Mich.

'20 PACKARD 6 touring — 1st yr. of series. Complete, with orig. side curtains; 38,000 orig. mi. Barn-aged. $850. Dr. Goodman, 14 W. Central, Natick, Mass.

'16 SEAGRAVE "F" 80-hp fire pumper in good operating cond. Chain drive, all-bronze pump, orig. bell, equipment, etc. Fast. $1250. Wood, 1788 Beacon St., Brookline, Mass.

'36 CADILLAC Fleetwood V-8 sed. Sidemounts, disc covers. Over $350 spent in reconditioning; needs paint & slip covers. Good running order. $650. G. F. Wood, 9 Brimmer St., Boston, Mass.

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continued on page 82

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'32 PACKARD Super 8 4-dr., with sidemounts. Needs restoration. Complete, with extra parts. A real classic. Photo by request. $200, as is. Ronald Koalska, 1151 Maple St., Red Wing, Minn.

'41 CADILLAC sed. Black, with ww's; like new inside & out. Stick shift; r. & h. $395. Also classic Packards for sale. Bruce Clayton, 125 Main St., Lakewood, N. J. Phone FOxcroft 3-3222.

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'54 KAISER-DARRIN rdstrs. Have 2 — both in perf. cond. One red, with white top; other white, with black top. Will sell one or both — $1800 ea. E. D. Bitler, 1201 Calhoun St., Trenton, N. J.

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'40 CADILLAC Fleetwood 60 Special — 6-wheeled black beauty. Exc. cond. — represents over $1200 investment since July '59. Asking $800. J. G. Thompson, 613 Remington Dr., Sunnyvale, Calif. Phone RE 6-9625.

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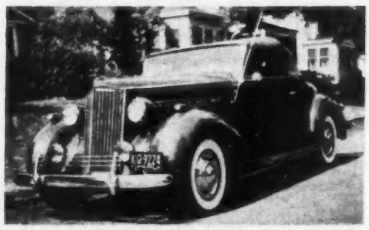
'37 PACKARD 110 conv. rdstr. with rumbleseat. R & h; ww's. Green, recent white vinyl top — otherwise unrestored. Running gear &



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SELL OR SWAP

MOTOR TREND COLLECTION — Sept. '49 (Vol. 1, No. 1) thru Oct. '59. Sell or trade for best offer. L. J. Garden, 13030 Corliss, Seattle 33, Wash.

'56 PACKARD Patrician. Fully automatic; torsion bars, refrigeration. Exc. thruout, incl. tires; 60,000 mi. $800. Swap up or down for interesting car with standard transmission & o.d. R. H. Timberlake Jr., 704 Monticello Dr., Tallahassee, Fla.

'35 LA SALLE conv. cpe. with rumbleseat. '50 Olds engine, automatic transmission with floor selector. Needs minor work. Sell or trade for what-have-you? Charles R. Ford, 612 Leonard Ave., De Kalb, Ill. Phone 6-6767.

WANTED

ANTIQUE STEAM CARS — restored or unrestored. Advise price, cond., make, model, yr. Any pix will be returned. Also need steam car books, manuals. Bill Slep, P.O. Box 178, Ellenton, Fla.

'30 OR '31 FORD rdstr., cpe. or cabriolet body. Body must be stock & within 50-mile radius. Will pay up to $100. Robert M. Russell Jr., 157 Mt. Pleasant Ave., Ambler, Pa.

MOTOR TREND back issues: All of '54, Feb. thru Sept. '55, March '56. Also want '55 (only) Cadillac owners' manual, advertising brochure, technical material, etc. Howard G. Hartmann Jr., 4948 Roberta Dr., Pittsburgh 36, Pa.

DYKES AUTOMOBILE ENCYCLOPEDIA — yrs. 1917-'18 or '19. Carl E. Johnson, 619 5th Ave., Belle Fourche, S. D.

'37 OR '38 CHRYSLER Imperial conv. cpe. Body must be in good shape. Write, giving details. J. C. Gruse, R.R. 1, Rosedale, Ind.

'56 PACKARD Caribbean. State cond., price & color. If possible, send a picture. James E. Manifold, Box 332, Martinsburg, Pa.

OLD AUTOMOBILE CATALOGS, manuals, salesmen's data books, Motor Annual Show issues, ATJ magazines, radiator ornaments (mascots), motometers of cars of '20s & '30s. Paying top prices. Sheldon J. Lewis, 61-33 213th St., Bayside, L. I., N. Y.

ORIGINAL automobile owners instruction books, sales catalogs, shop manuals — any make 1900-'25, classics '25-'35. Also ALAM, ABT, NACC Handbooks. Prices & details in 1st letter, please. R. Pierce, 3517 Dollar Dr., Akron 19, Ohio.

***PLYMOUTH**—This car traveled 328 miles without a battery. Alternator, standard on 1961 Chrysler Corporation cars, provided all necessary electrical energy.*

Detroit to Chicago without a battery

The story of the amazing 328-mile test run from Detroit to Chicago made by two Chrysler Corporation cars without batteries . . . how the new Alternator delivered all the current needed to run the engine and heater, even in stop-and-go traffic.

One frigid morning in Detroit recently, our engineers started up two 1961 Chrysler Corporation cars, removed their batteries and headed for Chicago.

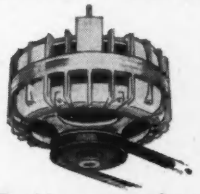
They stopped in traffic 24 times. They took a 56-minute lunch break. And after 5½ hours' actual traveling time and 328 miles of driving they reached Chicago. Without batteries.

How? Like all our 1961 cars, these two were equipped with the amazing new Alternator. Unlike the old-fashioned generator, the Alternator keeps charging even when the motor's idling.

In fact, as this test dramatically proves, the Alternator delivers enough energy to keep the car running under normal traffic conditions without calling on the battery at all! And you get it only in Chrysler Corporation cars *at no extra cost.*

We don't recommend that you try this with your car, no matter what make it is. But we do think this shows clearly why the Alternator takes a load off the battery.

Sound good? See your dealer. *Let a drive bring out the difference great engineering makes.*



***Battery-saving Alternator** keeps battery charged when generators can't. Many police and taxi fleets pay extra to get special Alternator installations. Yet the amazing new Alternator is standard equipment on all 1961 Chrysler Corporation cars.*

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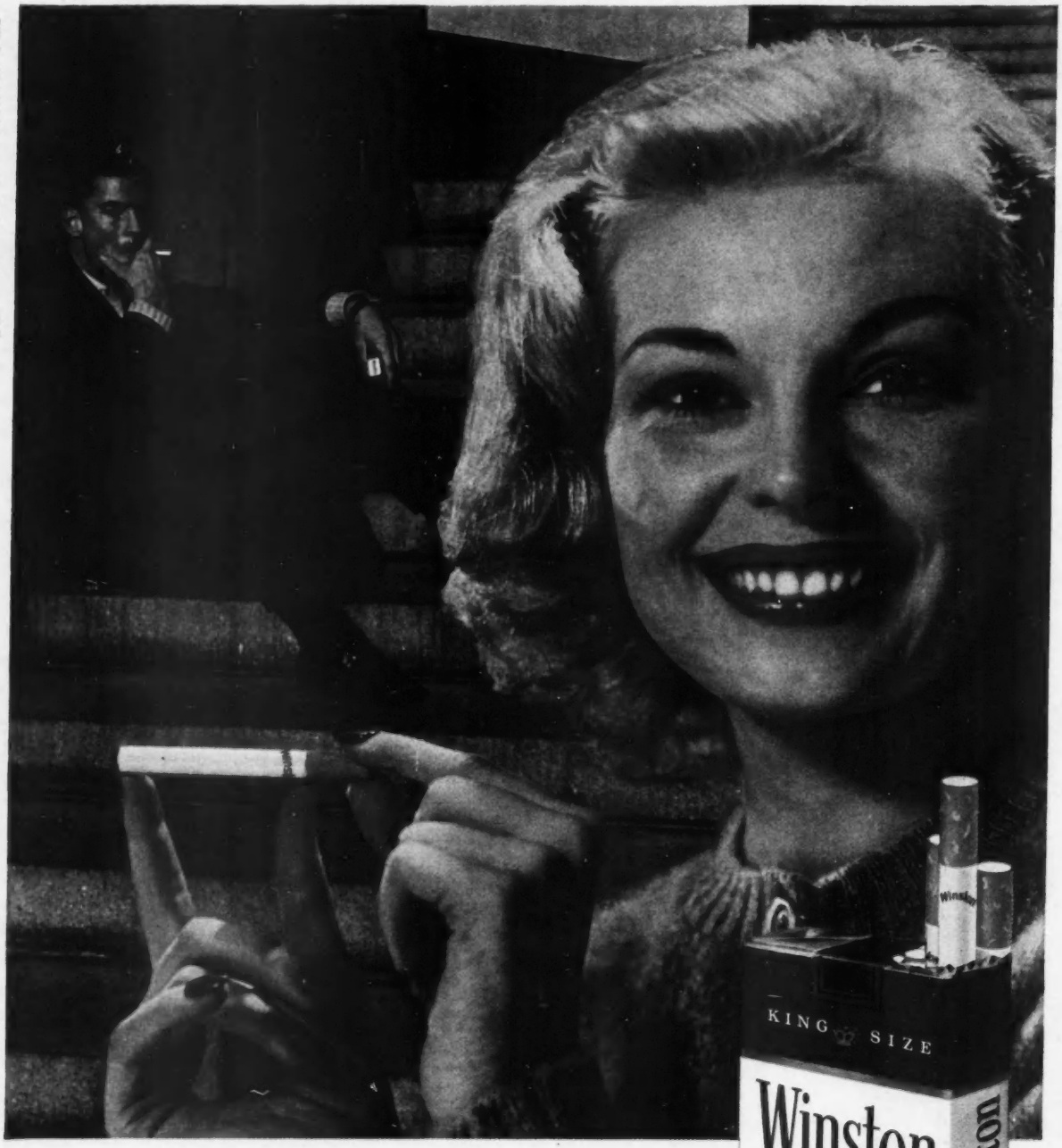

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